AN AID TO MATERIA MEDICA

DAWBARN

REVISED AND ENLARGED BY

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AN AID TO MATERIA MEDICA

BY

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PREFACE TO THE THIRD EDITION.

THE changes in the Pharmacopœia of 1890 (first published late in 1893) have made necessary a complete revision of this book. Many additional drugs and preparations have become official, while others have been dismissed. Changes in the strength and composition of various medicines have been made, the list of the more important of which will be found in the appendix.

There have also been added to this edition several brief chapters and tables, which it is hoped may be useful, *e. g.* : rules for the dosage of medicines in childhood; the natural orders of drugs; the percentage of alcohol in various unofficial wines, liquors, etc.; a list of the more important new remedies; some dangerous abbreviations in prescription-writing; an article on incompatibility; etc.

For students, the author believes such a volume as this to be of value; since examiners require much that the practitioner soon lays aside. The writer, after thirteen years as a physician, finds himself using, however, a very limited range of drugs; and believes it would be the part of wisdom to drop

from the official list at least half of those now cumbering it—possibly even more.

Pleasant medication—a subject sorely neglected in our schools—demands, too, that the bulk of the preparations now in the Pharmacopœia shall be laid aside. Wherever cost permits, active principles should supplant the crude drug, because of greater certainty in dosage. Tablet-triturates, too, are fast replacing the fluid extracts, tinctures, infusions, decoctions; and by further aid of gelatine- or sugar-coated pills, of gelatine capsules for bitter fluids, and of gelatine wafers for unpleasant powders, it is entirely possible to-day to avoid ever giving a dose which is objectionable to the taste. Neglect of this cardinal rule of common sense drives practice directly into the hands of quacks, who are apt to remember it.

To young physicians, the writer would add the hint, that it is always unwise to use any medicament, whether patent or proprietary, the exact and full ingredients of which are not published. And for doctors to patronize manufacturers who step aside from the path of propriety, in their greed for money, so far as to advertise their cures in public places and in newspapers, is to injure the profession, and ultimately themselves individually.

We are greatly indebted to Dr. Charles Rice, Chairman of the Committee of Revision and Publication of the latest U. S. Pharmacopœia, for information concerning the new drugs, their dosage, etc.

The entire work of preparing this third edition has been performed by Dr. Woolsey Hopkins, of this city, to whom the writer wishes hereby to express his appreciation, and recognition of the careful and accurate manner in which this labor, involving months of time, has been completed.

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INTRODUCTORY.

THIS little work aims to present, in brief space and tabular form, all the drugs and preparations recognized by the present Pharmacopœia, with their doses expressed in both apothecaries' and metric systems; also the exact composition and strength of all preparations. Synonyms, pronunciation, and, in the case of drugs of vegetable origin, the derivation (as plant, shrub, tree) and habitat are given. A table of solubilities of chemicals in water and alcohol has been added.

It has seemed to the writer that a work of this scope, if accurate and reliable, would prove useful for ready reference both to the student preparing for examination and to the practitioner; and much care and time have been devoted to insure freedom from errors of statement.

No other book save the Dispensatory (containing more than fifteen hundred pages) presents the facts grouped here. The Pharmacopœia names no doses; those herein given, in both systems, are for the most part recommended by the U. S. Dispensatory, latest edition; in a few instances Wood's Materia Medica being preferred as an authority.

Following the Dispensatory, the metric doses of fluids are expressed in cubic centimeters instead of grams.

It is hoped that the blank interleaved pages may prove a useful feature, permitting the admission, in alphabetical order, of any unofficial drugs or preparations which the owner of the book may deem of enough value to warrant comment.

The method of metric prescription-writing which has been introduced seems not to be generally known. It has simplicity to recommend it.

CONTENTS.

DRUGS.

OFFICIAL PREPARATIONS, THEIR STRENGTH AND DOSAGE.*

THE doses given throughout this book are for adults. For children the following rules will be found convenient:

1. Dr. Young's Rule. The proportionate dose is found by dividing the age by the age plus twelve $\left(\frac{\text{age}}{\text{age}+12}\right)$. Thus for a child one year old, $\frac{1}{1+12} = \frac{1}{13}$; two years, $\frac{2}{2+12} = \frac{1}{7}$, etc., the dose for an adult.

2. Dr. R. O. Cowling's Rule. The proportionate dose for any age under adult life is represented by the number of the following birthday divided by twenty-four, *i. e.*, for one year, $\frac{2}{24} = \frac{1}{12}$; for two years, $\frac{3}{24} = \frac{1}{8}$, etc.

3. Dr. Clark's Rule. The proportionate dose is represented by a fraction whose numerator is the patient's weight, and whose denominator is 150, the average weight of an adult. Thus, for a child weighing twenty-five pounds, $\frac{25}{150} = \frac{1}{6}$; thirty pounds, $\frac{30}{150} = \frac{1}{5}$, etc., of the adult dose.

Children bear opiates badly, and the dose must in them be reduced out of proportion. Indeed a new-born child should not receive opium in any dose whatever. But, on the other hand, they stand comparatively large doses of several other drugs, such being Arsenic, Aconite, Belladonna, Ipecac, Squills, Jaborandi, Mercury, Quinine, Laxatives.

* Those few drugs and preparations which, although not official, it has been thought advisable to introduce, are indicated by ✠ placed before them. The strength of all preparations is given in *parts by weight.*

The dose for hypodermic injection should be one half to three fourths that given by the mouth. The dose per rectum should be one fourth larger than that by the mouth, save in the instance of Strychnine, which seems to act as vigorously by the rectum as by the mouth in the same dose.

Gm.
Cc.

Absinth'ium.—WORMWOOD. The leaves and tops of Artemisia Absinthium. A perennial plant (nat. ord. Compositæ). Europe, and naturalized in the U. S.

Absinthium, in powder, gr. xx.–xl. 1.30–2.60

Vinum Aromaticum contains 1 % of Wormwood.

Aca'cia.—GUM ARABIC. A gummy exudation from Acacia Senegal. A small tree (nat. ord. Leguminosæ). Africa chiefly.

Acacia, powdered,
Mucilago Aca'ciæ,
Syrupus Acaciæ,
} Dose indifferent; used as vehicles.

Acetanili'dum.—ACETANILID ANTIFEBRIN. A white odorless powder.

Acetanilidum, gr. ii.–xv. 0.12–0.97

Ac'idum Acet'icum.—ACETIC ACID. A liquid composed of 36 % of absolute acetic acid, and 64 % of water.

Acidum Aceticum. A mild caustic.

Acidum Aceticum Dilutum (6 % of absolute acetic acid), ʒ ss.–i. 2.–4.

Acidum Aceticum Glacia'le, nearly or quite absolute acetic acid. At or below 59° F. a crystalline solid. Caustic.

Ac'idum Arseno'sum.—ARSENOUS ACID. [White Arsenic. Arsenic Trioxide.] Either as an opaque powder or in transparent or semi-transparent masses; permanent in the air, odorless and tasteless, and having a faintly acid reaction. See Arsenum.

		Gm. Cc.

Ac'idum Benzo'icum.—BENZOIC ACID. White, lustrous scales or needles. See Benzoinum.

Ac'idum Bo'ricum.—BORIC ACID. [Boracic Acid.] Transparent, colorless, six-sided plates.

Acidum Boricum,	ʒ ss.	2.

Glyceri'tum Boroglyceri'ni (31 %).

Ac'idum Carbol'icum.—CARBOLIC ACID. [Phenol.] A product of the distillation of coal-tar between the temperatures of 180°–190° C. [356°–374° F.] Colorless, interlaced, needle-shaped crystals, sometimes acquiring a pinkish tint. Deliquescent on exposure. Faintly acid reaction.

Acidum Carbolicum,	gr. i.–iij.	0.06–0.18
Glyceritum Ac'idi Carbol'ici, (20 %).	♏ ii.–v.	0.12–0.31
Unguentum Acidi Carbolici,	1 in 10.	

Ac'idum Carbol'icum Cru'dum.—CRUDE CARBOLIC ACID. A liquid consisting of various constituents of coal-tar, chiefly cresol and phenol, obtained by fractional distillation.

Used for disinfecting purposes.

Ac'idum Chro'micum.—CHROMIC ACID. Small, crimson, needle-shaped or columnar crystals, deliquescent. With strong alcohol, glycerin, spts. æth. nitr., or other easily oxidizable substances, it is liable to cause combustion or explosion.

Used as a caustic.

Ac'idum Ci'tricum.—CITRIC ACID. An organic acid, usually prepared from lemon-juice. Colorless prisms.

Acidum Citricum,	gr. v.–ʒ ss.	0.30–2.
Syrupus Ac'idi Ci'trici,*	ʒ i.–iv.	4.–15.

Ac'idum Gal'licum.—GALLIC ACID. A solid in needles or prisms. An organic acid, obtained from nutgall, or prepared from tannic acid.

Acidum Gallicum,	gr. v.–xv.	0.30–1.

* Contains nearly one part citric ac., and one part spirit of lemon, in 100.

Gm.
Cc.

ΦAc'idum Hydriod'icum.—HYDRIODIC ACID.

Syrupus Ac'idi Hydriod'ici. See Iodum.

Ac'idum Hydrobro'micum Dilu'tum.—DILUTED HYDROBROMIC ACID. A liquid composed of 10 % of absolute Hydrobromic Acid, and 90 % of water.*

Acidum Hydrobromicum Dilutum, ʒ ij. 8.

Ac'idum Hydrochlo'ricum.—HYDROCHLORIC ACID. [Muriatic Acid, Pharm. 1870.] A liquid composed of 31.9 % of absolute Hydrochloric Acid gas and 68.1 % of water.

Acidum Hydrochloricum, ♏ v.–x. 0.30–0.60

Acidum Hydrochloricum Dilutum,† ♏ xv.–ʒ ss. 1.–2.

Ac'idum Hydrocyan'icum Dilu'tum.—DILUTED HYDROCYANIC ACID. [Prussic Acid, Cyanhydric Acid.] A liquid composed of 2 % of absolute Hydrocyanic Acid, and 98 % of water.

Acidum Hydrocyanicum Dilutum, ♏ ij.–iv. 0.12–0.25

Potas'sii Cyan'idum,‡ gr. ⅛ 0.008

Potassii Ferrocyanidum, chiefly pharm. use.

Ac'idum Hypophosphoro'sum Dilu'tum.—DILUTED HYPOPHOSPHOROUS ACID. A liquid composed of 10 % by weight of absolute Hypophosphorous Acid and 90 % of water.

Acidum Hypophosphorosum Dilutum, ♏ x.–ʒ i. 0.62–3.7.

Ac'idum Lac'ticum.—LACTIC ACID. An organic acid composed of 75 % of absolute Lactic Acid, and 25 % of water.

Acidum Lacticum, ♏ xv.–ʒ ss. 1.–2.

Syrupus Calcii Lactophosphatis. See Calcium.

Ferri Lactas. See Ferrum.

Strontii Lactas. See Strontium.

Ac'idum Ni'tricum.—NITRIC ACID. A liquid composed of 68 % of absolute Nitric Acid, and 32 % of water.

* Two fluiddrachms contains 12 grains of bromine, equivalent in this to 18 grains of the bromide of potassium.

† Hydrochloric acid, five parts; water, eleven parts. It contains 10 % of absolute hydrochloric acid.

‡ Dose, gr. $\frac{1}{10}$ to $\frac{1}{12}$ (Wood).

		Gm. Cc.
Acidum Nitricum,	♏ v.–xv.	0.30–1.
Acidum Nitricum Dilutum,*	♏ xx.–xl.	1.25–2.50

Ac'idum Nitrohydrochlo'ricum. — NITROHYDROCHLORIC ACID. [Nitromuriatic Acid, Pharm. 1870. Aqua Regia.] Nitric Acid, 18%; Hydrochloric Acid, 82%.

Acidum Nitrohydrochloricum,	♏ iij.–vi.	0.18–0.36
Acidum Nitrohydrochloricum Dilutum,†	♏x.–xx.	0.60–1.25

Ac'idum Ole'icum.—OLEIC ACID. A yellowish, oily liquid, tasteless, nearly odorless, neutral reaction.

Used in the preparation of oleates.

Ac'idum Phosphor'icum.—PHOSPHORIC ACID. A liquid composed of Orthophosphoric Acid, 85%, and water, 15%.

Acidum Phosphoricum,	♏ v.-x.	0.30–0.60
Acidum Phosphoricum Dilutum,‡	♏ xx.– ʒ i.	1.25–3.75

Ac'idum Salicyl'icum.—SALICYLIC ACID. White, prismatic, needle-shaped crystals.

Acidum Salicylicum,	gr. x.– ʒ i.	0.60–3.75
So'dii Salicy'las,§	gr. xx.– ʒ i.	1.30–3.75
Lith'ii Salicylas,‖	gr. xx.–xl.	1.30–2.60
Physostigmi'næ Salicylas.	See Physostigma.	

A'cidum Steari'cum.—STEARIC ACID. An organic acid usually obtained from the more solid fats, chiefly tallow.

Ac'idum Sulphu'ricum.—SULPHURIC ACID. [Oil of Vitriol.] A liquid, not less than 92.5% absolute Sulphuric Acid, and not more than 7.5% water.

Acidum Sulphuricum, Caustic.¶

* Nitric acid, one part; water about six parts. It contains 10% of absolute nitric acid.

† Nitric acid, four parts; hydrochloric acid, eighteen parts; water, seventy-eight parts.

‡ Phosphoric acid, two parts; water, fifteen parts. It contains 10% of orthophosphoric acid.

§ One drachm contains 40 grains of salicylic acid.

‖ Is deliquescent. Every drachm contains 57.25 grains of salicylic acid, and 2.75 grains of lithium.

¶ Michel's Paste = sulphuric acid, three parts; finely powdered asbestos, one part.

		Gm. Cc.
Acidum Sulphuricum Aromaticum,*	♏ x.–xx.	0.60–1.25
Acidum Sulphuricum Dilutum,†	♏ x.– ʒ ss.	0.60–1.90

Ac'idum Sulphuro'sum.—SULPHUROUS ACID. A liquid not less than 6.4% of Sulphurous Acid Gas (SO_2) and not more than 93.6% water.

Acidum Sulphurosum,	♏ v.– ʒ i.	0.30–3.57
Potas'sii Sulphis,	gr. xv.– ʒ i.	1.–3.90
So'dii Sulphis,	ʒ ss.–i.	1.90–3.90
Sodii Bisul'phis,	ʒ ss.–i.	1.90–3.90
Sodii Hyposul'phis,	gr. x.–xx.	0.65–1.30

Ac'idum Tan'nicum.—TANNIC ACID. [Tannin. Gallo-Tannic Acid.] Light yellowish scales. Obtained from nutgall.

Acidum Tannicum,	gr. i.-xx.	0.06–1.30
Glyceritum Ac'idi Tan'nici (20%)		
Trochis'ci Acidi Tannici,	1 = gr. i	0.06
Unguentum Acidi Tannici,	1 in 5	
Collodium Stypticum,	See Collodium.	

Ac'idum Tartar'icum.—TARTARIC ACID. An organic acid usually prepared from Argols. Colorless, transparent prisms.

Acidum Tartaricum,	gr. x.–xx.	0.65–1.30

Aconi'tum.—ACONITE. [Monkshood, Wolfsbane.‡] The tuberous root of Aconitum Napellus. A perennial herbaceous plant (nat. ord. Ranunculaceæ). Europe.

Extractum Aconiti,	gr. $\frac{1}{8}$–$\frac{1}{4}$.	0.01–0.016
Extractum Aconiti Flu'idum,	♏ ss.–i.	0.03–0.06
Tinctura Aconiti (35%)	♏ ss.–v.	0.03–0.30

* [Elixir of vitriol.] Contains sulphuric acid (1 part in 10), alcohol, tincture of ginger, and oil of cinnamon.

† Sulphuric acid, one part; water, eight parts. It contains 10% of official sulphuric acid.

‡ *Wolfsbane*, aconite; *leopardsbane*, arnica; *ratsbane*, arsenic; *fleabane*, erigeron; *henbane*, hyoscyamus; *dogbane*, periwinkle; *cowbane*, water-hemlock.

		Gm. Cc.
Φ Fleming's Tincture of Aconite.*	Chiefly external use.	
Φ Aconitine.†		

A'deps.—LARD. [Axungia Porci.] The prepared internal fat of the abdomen of Sus scrofa (the hog).

Adeps Benzoina'tus.	See Benzoin.	
Ceratum,	lard 7, white wax 3.	
Unguentum,	lard 4, yellow wax 1.	
Oleum Ad'ipis.‡	Pharm. use.	

A'deps Lan'æ Hydro'sus.—HYDROUS WOOL-FAT. The purified fat of the wool of sheep, mixed with not more than 30 % of water. External use.

Æ'ther.—ETHER. [Stronger Ether of U. S. P. 1880.] Contains about 96 % Ethyl Oxide, and about 4 % Alcohol.

Æther,	ʒ ss.–i.	1.90–3.75
Spiritus Æ'theris,§	ʒ i.–iij.	3.75–11.25
Spiritus Ætheris Compos'itus,‖	ʒ ss.–ij.	1.90–7.50
Spiritus Ætheris Nitro'si,¶	ʒ ss.–i.	1.90–3.75

Æ'ther Acet'icus.—ACETIC ETHER. [Acetate of Ethyl.]

Æther Aceticus,	♏xv.–ʒ ss.	0.90–1.90

Al'cohol.—ALCOHOL. [Rectified Spirit, Spirit of Wine.] A liquid 91 parts Ethyl Alcohol, and 9 parts water.

Alcohol.**	Dose, q.s.	

* (ʒ xss. in O i.) Is very nearly twice as strong as the official tincture, which is ʒ vss. in O i.

† The ordinary alkaloid of the market is unreliable. The crystalline form (Duquesnel) alone should be used. Dose: gr. 1/200; gm. 0.0003.

‡ (Lard oil.) A fixed oil expressed from lard at a low temperature.

§ Is ether diluted with twice its volume of alcohol (ether 30, alcohol 70 parts).

‖ (Hoffmann's Anodyne.) Ether 32½, alcohol 65, ethereal oil 2½ parts.

¶ (Sweet spirit of nitre.) An alcoholic solution of ethyl nitrite (nitrous ether) containing 5 % of the crude ether.

** The average percentage by measure of alcohol (sp. gr. 0.825) of the following wines, liquors, etc. is: Sherry 19, Madeira 22, Malaga 18, Tokay 9, Burgundy 14, Claret 15, Hock 12, Champagne 13, Rum 53, Gin 51, Beer 1-3, Ale 7, Porter 4, Stout 7, Cider 7.—Wood, Dunglison, *Gaillard's Medical Journal.*

		Gm. Cc.
Alcohol Absolutum 99 %		
Alcohol Deo'doratum 92.5 %		
Alcohol Dilu'tum (Proof Spirit), Alcohol 41 %, water 59 %		
Spiritus Frumen'ti,* about 44–50 % absolute Alcohol.		
Spiritus Vini Gal'lici,† about 39–47 % abs. Alcohol.		
Vinum Album, 10–14 % abs. Alcohol.		
Vinum Rubrum, 10–14 % abs. Alcohol.		

Al'lium.—GARLIC. The bulb of Allium sativum. A perennial plant (nat. ord. Liliaceæ). Southern part of Europe.

Allium,	ʒ ss.–ij.	1.95–7.80
Syrupus Al'lii,	ʒ i.–ij.	3.80–7.60

Al'oe Barbaden'sis.—BARBADOES ALOES. The inspissated juice of the leaves of Alœ vera ‡ (nat. ord. Liliaceæ).

Aloe Barbadensis,	gr. ii.–x.	0.12–0.65
Aloenum,	gr. ¼–.ii.	0.016–0.12

Al'oe Socotrina.—SOCOTRINE ALOES, The inspissated juice of the leaves of Aloe Perryi. A plant from the east coast of Africa, island of Socotra, and Arabia.

Aloe Sócotrina,	gr. ij.–x.	0.12–0.65
Aloe Purifica'ta,		
Extractum Al'oës,		
Pilulæ Aloës.§		
Pilulæ Aloës et Asafœt'idæ.‖		
Pilulæ Aloës et Ferri.¶		
Pilulæ Aloës et Mas'tiches.**		

* Whisky. Obtained by distillation of fermented grain, and at least two years old.

† Brandy. Obtained by distillation of fermented grapes, and at least four years old.

‡ Also obtained from other varieties of Aloes.

§ Aloes and soap, āā gr. 2 in each pill.

‖ Aloes, asafœtida, and soap, āā gr. 1⅓ in each pill.

¶ Aloes, dried sulphate of iron, and aromatic powder, āā gr. 1 in each pill.

** (Lady Webster's dinner pill.) Aloes, gr. 2, mastic and red rose, āā gr. ½ in each pill.

		Gm. Cc.
Pilulæ Aloës et Myrrhæ.*		
Tinctura Aloës (1 in 10),	ʒ ss.–ij.	1.90–7.50
Tinctura Aloës et Myrrhæ,†	ʒ i.–ij.	3.75–7.50

Althæ'a.—MARSHMALLOW. The root of Althæa officinalis. An herbaceous perennial (nat. ord. Maloaceæ). Europe and United States.

Syrupus Althæ'æ,	ʒ i.–℥ ss.	3.75–15.

Alu'men.—ALUM. [Aluminii et Potassii Sulphas, Pharm. 1870. Potash Alum.]

Alumen,	gr. x.–ʒ ss.	0.65–2.
Alumen Exsicca'tum,	External use.	
Alumini Hy'dras,	External use.	
Alumini Sul'phas,	External use.	

Ammoni'acum.—AMMONIAC. The gum-resin obtained from Dorema Ammoniacum. A plant (nat. ord. Umbelliferæ). Persia.

Ammoniacum,	gr. x.–ʒ ss.	0.65–1.95
Emulsum Ammoniaci,‡	℥ ss.–i.	15.–30.

Emplastrum Ammoniaci cum Hydrar'gyro. See Mercury.

Ammo'nia.—A GAS (NH_3). The gas Ammonia is not official.

Aqua Ammo'niæ (10 % Ammonia),	♏ x.–ʒ ss.	0.60–1.90
Aqua Ammoniæ For'tior (28 % Ammonia). External use.		
Spiritus Ammoniæ (10 % Ammonia),	♏ x.–ʒ ss.	0.60–1.90
Spiritus Ammoniæ Aromat'icus,§	ʒ ss.–i.	1.90–3.75
Linimentum Ammoniæ. ‖		
Liquor Ammo'nii Aceta'tis,¶	℥ ss.–iss.	15.–45
Ammonii Carbo'nas (Sal Volatile),	gr. v.–x.	0.33.–0.65

* Aloes, gr. 2; myrrh, gr. 1: aromatic powder, gr. ½ in each pill.

† āā 1 in 10 [Elixir Proprietatus].

‡ (Mistura A., 1880, milk of A.) Ammoniac 4, water 100 parts.

§ Ammonii carbonas, 3.4%; aq. ammoniæ, 9%; and oils of lemon, lavender flowers, and nutmeg.

‖ Aq. ammonia 35, cotton-seed oil 60 parts.

¶ [Spirit of Mindererus], contains about 5% of acetate of ammonium in dilute acetic acid.

		Gm. Cc.
Ammonii Chlo'ridum,*	gr. v.–x.	0.33–0.65
Trochis'ci Ammonii Chlo'ridi,	gr. iss in each.	
Ammonii Nitras.	Pharm. purposes.	
Ammonii Benzoas.	See Benzoin.	
Ammonii Bromidum.	See Bromine.	
Ammonii Iodidum.	See Iodine.	
Ammonii Valerianas.	See Valerian.	

Amyg'dala Ama'ra.—BITTER ALMOND. The seed of Prunus Amygdalus, variety Amara. A tree (nat. ord. Rosaceæ). Persia, Syria, and Barbary; cultivated in the south of Europe.

Aqua Amyg'dalæ Ama'ræ,†	ʒ ij.	7.50
Oleum Amygdalæ Amaræ,	♏ ¼–i.	0.016–0.06
Spiritus Amygdalæ Amaræ,‡	ʒ ss.–ii.	1.90–7.50

Amyg'dala Dul'cis.—SWEET ALMOND. The seed of Prunus Amygdalus, variety dulcis. A tree (nat. ord. Rosaceæ). See Amygdala Amara.

Emulsum Amyg'dalæ (Milk of Almonds). As a vehicle.

Syrupus Amygdalæ § (Syrup of Orgeat),	ʒ i.–℥ i.	3.75–30.
Oleum Amygdalæ Expres'sum,	ʒ i.–℥ i.	3.75–30.

A'myl Ni'tris.—AMYL NITRITE. A clear, pale-yellowish liquid, of an ethereal, fruity odor, aromatic taste, and neutral or slightly acid reaction.

Amyl Nitris,‖	♏ iij.–v.	0.18–0.30

Am'ylum.—STARCH. The fecula of the seed of Zea Mays (wheat), (nat. ord. Gramineæ).

Amylum, powdered,	External use.
Glyceri'tum Am'yli,¶	External use.

Ani'sum.—ANISE. The fruit of Pimpinella Anisum. A

* (Sal ammoniac. Muriate of ammonia.)
† Oil of bitter almonds, 1 in 1000.
‡ Oil of bitter almond, 1 %.
§ Contains a small quantity of bitter almond.
‖ Either inhaled or given by the mouth.
¶ ("Plasma.") A translucent jelly—starch 1, glycerin 8 parts.

		Gm. Cc.
plant (nat. ord. Umbelliferæ). Egypt and the Levant; cultivated in Europe and the United States.		
Anisum, powdered,	gr. xx.–ʒ ss.	1.30–1.95
Aqua Ani'si.	As a vehicle.	
Oleum Anisi,*	♏ v.–xv.	0.30–0.90
Spiritus Anisi,	ʒ i.–ij.	3.75–7.50

An'themis.—CHAMOMILE. The flower heads of Anthemis nobilis. An herbaceous plant (nat. ord. Compositæ). Europe.

Anthemis, powdered,	ʒ ss.–i.	1.95–3.90
Φ Oleum Anthem'idis,	♏ v.–x♦.	0.30–0.90
Φ Infusum Anthemidis,	℥ i.–ij.	30.–60.

Antimo'nium.—ANTIMONY. The metal Antimony is not official.

Antimo'nii et Potas'sii Tar'tras,†	gr. 1/16–i.	0.002–0.06
Φ Antimonii Oxysulphure'tum,‡	gr. ss.–ij.	0.03–0.12
Antimonii Ox'idum,§	Pharm. purposes.	
Antimonii Sul'phidum,‖	Pharm. purposes.	
Antimonii Sulphidum Purifica'tum,	Pharm. purposes.	
Antimonii Sulphura'tum,¶	gr. i.–xx.	0.06–1.25
Pilulæ Antimonii Compos'itæ.**		
Pulvis Antimonia'lis,††	gr. iij.–viij.	0.20–0.52
Vinum Antimonii,‡‡	♏ x.–ʒ i.	0.60–3.75

Syrupus Scillæ Comp. contains tartar emetic, gr. i. in ℥ i.

* The oil of A. of commerce is obtained chiefly from the fruit of a Chinese tree, the Illicium Anisatum, or Star Anise.

† (Tartar emetic.)

‡ (Kermes mineral.)

§ "Should not be used as a medicine, as it is uncertain. Used in making tartar emetic."

‖ "Used internally only in veterinary practice."

¶ "An uncertain medicine, and very little used."

** (Plummer's pill.) Calomel and A. sulphuratum, āā gr. ⅔ in each.

†† (James' powder.) A. oxidum, ⅓; precipitated phosphate of calcium, ⅔.

‡‡ Tartar emetic, about gr. ij. in ʒ i.; more exactly, gr. 1.8.

		Gm. Cc.

Apoc'ynum.—CANADIAN HEMP. The root of Apocynum cannabinum. A plant (nat. ord. Apocynaceæ). Indigenous.

Apocynum, powdered,	gr. x.–ʒ ss.	0.60–1.95
Extractum Apoc'yni Fluidum,	♏ viii.–ʒ ss.	0.50–1.95

A'qua.—WATER. Natural water in its purest attainable state.

Aqua Destilla'ta.—Distilled Water.

Argen'tum.—SILVER. The metal Silver is not official.

Argen'ti Iod'idum,	gr. i.–ij.	0.06–0.13
Argenti Ni'tras,	gr. ¼–½.	0.016–0.03
Argenti Nitras Dilu'tus,*	External use.	
Argenti Nitras Fu'sus,	External use.	
Argenti Ox'idum,	gr. i.	0.06
Argenti Cyan'idum.	Pharm. purposes.	

Ar'nicæ Flo'res.—ARNICA FLOWERS. The flower heads of Arnica montana. [Leopard's bane.] A perennial herbaceous plant (nat. ord. Compositæ). Northern Europe and Asia, and the northwestern U. S.

Tinctura Arnicæ Florum (1 in 5),	♏ x.–ʒ ss.	0.60–1.90

Ar'nicæ Ra'dix.—ARNICA ROOT. The rhizome and rootlets of Arnica montana. See Arnicæ Flores.

Extractum Arnicæ Radi'cis,	gr. iij.–v.	0.20–0.33
Extractum Arnicæ Radicis Fluidum,	♏ v.–x.	0.30–0.60
Tinctura Arnicæ Radicis (1 in 10),	♏ xx.–ʒ ss.	1.25–1.90
Emplastrum Arnicæ (⅓ extract of Arnica root).		

Arse'num.—ARSENIC. The metal Arsenum is not official.

Acidum Arseno'sum (arsenic),	gr. $\frac{1}{50}$–$\frac{1}{12}$.	0.001–0.005
Arse'ni Iod'idum,	gr. $\frac{1}{20}$–$\frac{1}{10}$.	0.003–0.006
So'dii Arse'nas,	gr. $\frac{1}{12}$–$\frac{1}{8}$.	0.005–0.02
Liquor Ac'idi Arseno'si,†	♏ ij.–viij.	0.12–0.50

* A white, hard solid, equal parts nitrate of silver and nitrate of potassium. "Mitigated Stick."

† Arsenous ac., 1 in 100; hydrochloric ac., 5 in 100. Is the liq. arsenici chloridi of 1870.

		Gm. Cc.
Liquor Arseni et Hydrar'gyri Iod'idi,*	♏ v.–x.	0.30–0.60
Liquor Sodii Arsena'tis,†	♏ ij.–viij.	0.12–0.50
Liquor Potas'sii Arseni'tis,‡	♏ ij.–viij.	0.12–0.50

Asafœt'ida.—ASAFŒTIDA. A gum resin obtained from the root of Ferula fœtida. A plant (nat. ord. Umbelliferæ). Persia and Afghanistan.

Asafœtida,	gr. v.–xv.	0.30–1.
Pilulæ Asafœt'idæ,	gr. iij. in each.	
Pilulæ Aloës et Asafœtidæ.	See Aloe.	
Emulsum Asafœtidæ § (Milk of A.),	℥ ss.–℥ i.	15.–30.
Tinctura Asafœtida (1 in 5),	ʒ ss.–i.	1.90–3.75

Ascle'pias.—PLEURISY ROOT. The root of Asclepias tuberosa. A plant (nat. ord. Asclepiadeæ). Indigenous.

Asclepias, powdered,	gr. xx.–ʒ i.	1.30–3.90
Extractum Asclepia'dis Fluidum,	♏ xv.–ʒ i.	0.90–3.90

Aspid'ium.—MALE FERN. The rhizome of Dryopteris Filix mas [Europe and elsewhere] and of Dryopteris marginalis [Indigenous] (nat. ord. Filices).

Oleoresi'na Aspid'ii,	ʒ ss.–i.	1.90–3.75

Aspidosper'ma.—QUEBRACHO. The bark of Aspidosperma Quebracho-blanco. A tree (nat. ord. Apocynaceæ).

Aspidosperma,	gr. v.–ʒ ss.	0.32–1.90
Extractum Aspidospermatis Fluidum,	♏ v.–ʒ ss.	0.32–1.90

Auran'tii Ama'ri Cor'tex.—BITTER ORANGE PEEL. The rind of the fruit of Citrus vulgaris. A small tree (nat. ord. Rutaceæ). Chiefly Florida, the south of Europe, and the West Indies.

Extractum Aurantii Amari Fluidum,	♏ xv.–ʒ ss.	0.90–1.90

* Donovan's solution = iodide of arsenic and red iodide of mercury, āā 1 in 100. Nearly equal in arsenical strength to gr. i.–ʒ i. of arsenous acid.

† Sodii arsenas, 1 in 100. Pearson's solution = sodii arsenas, gr. i.–ʒ i.; therefore is much weaker than the official solution.

‡ Fowler's solution = arsenous acid, 1 in 100; potass. bicarb., 2 in 100; tinct. lavand. comp., 3 in 100.

§ Is asafœtida, 4; water, 100 parts.

		Gm. Cc.
Tinctura Aurantii Amari,	ʒ i.–ij.	3.75–7.50

Auran'tii Dul'cis Cor'tex.—SWEET ORANGE PEEL. The rind of the fruit of Citrus Aurantium. See A. Amari Cortex.

Oleum Aurantii Cor'ticis. Pharm. purposes.

Tinctura Aurantii Dulcis,
Spiritus Aurantii,
Spiritus Aurantii Compositus,*
Elixir Aromaticum,†
Syrupus Aurantii,
} As vehicles.

Preparations of the flowers of both kinds of orange.

Oleum Aurantii Florum.‡ Pharm. purposes.

Aqua Aurantii Florum,
Aqua Aurantii Florum Fortior,§
Syrupus Aurantii Florum,
} As vehicles.

Au'rum.—GOLD. The metal Gold is not official.

Au'ri et So'dii Chlo'ridum,	gr. $\frac{1}{12}$.	0.005

Φ Ave'næ Fari'na.—OATMEAL. The meal prepared from the seeds of Avena sativa [Oats].

Bal'samum Peruvia'num.—BALSAM OF PERU. A balsam obtained from Toluifera Pereiræ. A tree (nat. ord. Leguminosæ). Central America chiefly. Naturalized in Ceylon.

Bal'samum Peruvia'num,	ʒ ss.	2.

Bal'samum Toluta'num.—BALSAM OF TOLU. A balsam obtained from Toluifera Balsamum. A tree (nat, ord. Leguminosæ). For habitat see Bals. Peruv.

Balsamum Tolutanum,	gr. x.–ʒ ss.	0.65–1.95

* Oil, orange peel, 20; oil of lemon, 5; oil coriander, 2; oil of anise, 5 parts in 100.

† Comp. spr. orange, 1.2; calcium phosphate, 1.5; syrup, alcohol, and water to 100.

‡ Oil of Neroli.

§ Saturated solution of the oil of orange flowers. Aqua Aurantii Florum is half strength.

		Gm. Cc.
Syrupus Tolutanus,*	℥ ss.–i.	15.–30.
Tinctura Tolutana (1 in 10).	ʒ i.–ij.	3.75–7.50

Ba'rii Dioxi'dum.—BARIUM DIOXIDE OR PEROXIDE. A heavy grayish or yellowish-white amorphous powder, odorless and tasteless. Used to make

Aqua Hydrogenii Dioxidi (3 % of H_2O_2).

Belladon'næ Fo'lia.—BELLADONNA LEAVES. [Deadly Nightshade.] The leaves of Atropa Belladonna. An herbaceous perennial plant (nat. ord. Solanaceæ). Europe; cultivated in this country.

Extractum Belladonnæ Foliorum Alcoholium,	gr. $\frac{1}{8}$–$\frac{1}{2}$	0.008–0.03
Tinctura Belladonnæ Foliorum (1 in 6.66),	♏ x.–ʒ ss.	0.60–1.90

Emplastrum Belladonnæ (Alc. ext., 1 in 5).

Unguentum Belladonnæ (Alc. ext., 1 in 10).

Belladon'næ Ra'dix.—BELLADONNA ROOT. The root of Atropa Belladonna. See Belladonnæ Folia.

Extractum Belladonnæ Radicis Fluidum,	♏ i.–ij.	0.06–0.12
Linimentum Belladonnæ.†		
Atropi'na (alkaloid of B.), Atropi'næ Sulphas,	gr. $\frac{1}{100}$–$\frac{1}{60}$.	0.0006–0.001

Benzi'num.—BENZIN. A purified distillate from American Petroleum.

Used in pharmacy.

Benzoi'num.—BENZOIN. A balsamic resin obtained from Styrax Benzoin. A tree (nat. ord. Styraceæ). East Indies chiefly.

Ammonii Ben'zoas, Lithii Benzoas, Sodii Benzoas, Acidum Benzo'icum,	gr. x.–ʒ ss.	0.65–1.95

* Bals. tolu., 1, sugar and water ad 100 parts.

† Ext. belladonnæ R. fluid., 95; camphor, 5 parts.

		Gm. Cc.
Tinctura Benzoi'ni (1 in 5),	♏xx.–ʒ ss.	1.25–1.90
Tinctura Benzoini Composita,*	ʒ ss.–ʒ ij.	1.90–7.50
Adeps Benzoina'tus † (1 in 50).		

Bismu'thum.—BISMUTH. The metal Bismuth is not official.

Bismu'thi et Ammo'nii Citras,	gr. i.–iij.	0.065–0.20
Bismuthi Citras,	Pharm. purposes.	
Bismuthi Subcarbo'nas, Bismuthi Subni'tras,	gr. x.–ʒ i.	0.65–3.90

Bro'mum.—BROMINE. A liquid, non-metallic element, obtained from sea-water and from saline springs.

Bromum,	♏ ½ –iij.	0.01–0.18
Ammo'nii Bro'midum,	gr. xx.–xl.	1.30–2.60
Cal'cii Bromidum,‡	ʒ ss.–ij.	1.95–7.80
Lith'ii Bromidum,	gr. xv.–ʒ ss.	1.00–1.95
Potas'sii Bromidum,	gr. xx.–ʒ i.	1.30–3.90
So'dii Bromidum,	ʒ ss.–ij.	1.95–7.80
Strontii Bromidum,	gr. v.–x.	0.31–0.65
Zinci Bromidum,	gr. iij.–x.	0.18–0.65

Bry'onia.—BRYONY. The root of Bryonia alba, and of Bryonia dioica. Perennial herbaceous plants (nat. ord. Cucurbitaceæ). Europe.

Bryonia, powdered,	gr. xx.–ʒ i.	1.30–3.90
Tinctura Bryo'niæ (1 in 10),	ʒ i.–ij.	3.75–7.50

Bu'chu.—BUCHU. The leaves of Barosma betulina, B. crenulata. Shrubs (nat. ord. Rutaceæ). Southern Africa.

Extractum Buchu Fluidum,	ʒ ss.–i.	1.90–3.75

Φ Caf'fea.—COFFEE. The seed of Coffea Arabica. A small tree. Arabia and Abyssinia; cultivated in many countries.

Caf'fei'na.—CAFFEINE. A feebly basic proximate principle generally prepared from the dried leaves from Thea

* Is "Friar's balsam." Contains benzoin 12, storax 8, bals. tolu 4, aloes 2, alcohol ad 100 parts.

† Is the unguentum benzoini of 1870.

‡ The bromides of calcium, lithium, and zinc are deliquescent.

		Gm. Cc.
sinensis, or from the dried seeds of Coffea Arabica or from Guarana, and occurring also in other plants.		
Caffeina,	gr. ss.–v.	0.03–0.30
Caffeina Citrata,	gr. ii.–v.	0.12–0.32
Caffeina Citrata Effervescens,	ʒ i.–iij.	3.80–11.25

Cal'amus.—CALAMUS. [Sweet Flag.] The rhizome of Acorus Calamus. An indigenous plant (nat. ord. Aroideæ).

Calamus, powdered,	gr. xx.–ʒ i.	1.30–3.90
Extractum Cal'ami Fluidum,	♏ v.–xv.	0.30–0.90

Cal'cium.—CALCIUM. The metal Calcium is not official.

Carbonate of Lime.	Cal'cii Carbo'nas Præcipita'tus,	gr. x.–xl.	0.65–2.60
	Creta Præpara'ta,	gr. x.–xl.	0.65–2.60
	Trochis'ci Cretæ, 1 = gr. iv.	0.25	
	Pulvis Cretæ Compos'itus,* used in Mist. Cretæ.		
	Mistura Cretæ,†	℥ ss.	15.
Calcii Chlo'ridum. Pharm. purposes.			
Calx—Lime. (Burned lime. Quicklime.) Pharm. purposes.			
Liquor Calcis.‡—Lime-water,		℥ ss.–iv.	15.–118.
Linimentum Calcis § (Carron oil).			
Syrupus Calcis,‖		ʒ ss.–ij.	1.90–7.50
Calcii Phosphas Præcipita'tus,		gr. x.–ʒ ss.	0.65–1.95
Syrupus Calcii Lactophospha'tis,¶		ʒ ij.–℥ ss.	7.50–15.
Calcii Sulphas Exsiccatus.		External use.	
Calx Sulphura'ta,** (60 % Ca S)		gr. $\frac{1}{10}$–$\frac{1}{3}$.	0.006–0.03

* Prepared chalk 30, powdered acacia 20, and sugar 50 parts.

† (Pulv. cretæ co., 20; aq. cinnam., 40; aq. ad 100 parts.) Contains about ʒ ss. of chalk in ℥ i.

‡ "An aqueous saturated solution containing about 0.15 % of hydrate of calcium."

§ Lime-water and cotton-seed oil, equal parts. (Linseed or olive oil may be used.)

‖ Lime 6, sugar 40, water ad 100 parts. ♏ xv. about equal ʒ i. of lime-water.

¶ This dose represents gr. iij.-vi. of the lime salt.

** "Commonly misnamed sulphide of calcium." Contains sulphide and sulphate of calcium; not less than 60 % calcium monosulphide.

		Gm. Cc.
Calcii Bromidum.	See Bromum.	
Calcii Hypophosphis.	See Phosphorus.	
Calx Chlorata.	See Chlorum.	

Calen'dula.—MARIGOLD. The fresh florets of Calendula officinalis. An herb (nat. ord. Compositæ).

Tinctura Calen'dulæ (1 in 5).	External use.	

Calum'ba.—COLUMBO. The root of Jateorrhiza palmata. A climbing plant (nat. ord. Menispermaceæ). Mozambique.

Calumba, powdered,	gr. x.–ʒ ss.	0.65–1.95
Extractum Calumbæ Fluidum,	♏xv.–ʒ ss.	0.90–1.90
Tinctura Calumbæ,	ʒ i.–℥ ss.	3.75–15.

Cambo'gia.—GAMBOGE. A gum-resin obtained from Garcinia Hanburii. A tree (nat. ord. Guttiferæ). Siam.

Cambogia,*	gr. ij.–vi.	0.13–0.40

Cam'phora.—CAMPHOR. A steareopten derived from Cinnamomum Camphora, and purified by sublimation. A tree (nat. ord. Laurineæ). Eastern Asia.

Camphora,	gr. v.–x.	0.33–0.65
Camphora Monobroma'ta,	gr. v.	0.33
Aqua Cam'phoræ (1 in 125),	℥ ss.–i.	15.–30.
Spiritus Camphoræ (1 in 10),	♏v.–ʒ i.	0.30–3.75

Ceratum Camphoræ (Camphor liniment, 1 in 10).

Linimentum Camphoræ (Camphor 1, Cotton-seed oil 4).

Linimentum Saponis.	See Sapo.	

Can'nabis In'dica.—INDIAN CANNABIS. [Indian Hemp.] The flowering tops of the female plant of Cannabis sativa (nat. ord. Urticaceæ), grown in the East Indies.

Extractum Cannabis In'dicæ,	gr. ¼–i.	0.016–0.06
Extractum Cannabis Indicæ Fluidum,	♏ ss.–i.	0.03–0.06
Tinctura Cannabis Indicæ (1 in 6.6),	ʒ ss.	1.90

Can'tharis.—CANTHARIDES. [Spanish Flies.] Cantharis vesicatoria. A beetle. Southern Europe and Western Asia.

* Pilulæ Catharticæ Compositæ U. S. = ext. colocynth. co., gr. 1⅓; calomel, gr. 1; cambogia, gr. ¼; ext. jalap., gr. ½.

		Gm. Cc.
Cantharis, powdered (seldom used),	gr. i.–ij.	0.06–0.13
Tinctura Canthar'idis (1 in 20),	♏ i.–v.	0.06–0.30
Ceratum Cantharidis (blistering plaster).*		For Blistering.
Collo'dium Cantharidatum, about ½ Canth.		
Emplastrum Picis Cantharidatum (warming plaster).†		

Cap'sicum.—CAPSICUM. [Cayenne Pepper. Chillies.] The fruit of Capsicum fastigiatum. A plant (nat. ord. Solanaceæ). Africa.

Capsicum,	gr. v.–x.	0.33–0.65
Extractum Cap'sici Fluidum,	♏ ss.–i.	0.03–0.06
Oleoresi'na Capsici,	♏ ¼–i	0.015–0.06
Tinctura Capsici (1 in 20),	ʒ ss.–i	1.90–3.75
Emplastrum Capsici.‡		

Car'bo Anima'lis.—ANIMAL CHARCOAL. [Bone Black.] Charcoal prepared from bone.

Carbo Animalis Purifica'tus,§	ʒ i.–℥ ss. or more.	3.90–15.

Carbo Ligni.—CHARCOAL. Charcoal prepared from soft wood.

Carbo Ligni,	ʒ i.–℥ ss. or more.	3.90–15.

Carbo'nei Disul'phidum.—DISULPHIDE OF CARBON. A clear, colorless liquid, with a strong, characteristic odor. External use.

Cardamo'mum.—CARDAMOM. The fruit of Elettaria repens. A plant (nat. ord. Scitamineæ). Malabar.

Tinctura Cardamo'mi (1 in 10),	ʒ i.	3.75
Tinctura Cardamomi Composita,‖	ʒ i.–ij.	3.75–7.50

Ca'rum.—CARAWAY. The fruit of Carum Carvi. A plant (nat. ord. Umbelliferæ). Europe.

Carum, powdered,	gr. xx.–ʒ i.	1.30–3 90
Oleum Cari,	♏ i.–x.	0.06–0.60

* Contains cantharis, 1 in 3.

† Cerate of canth. 8, Burgundy pitch 92 parts.

‡ Four inches square contain gr. iv. of oleoresin of capsicum.

§ As antidote chiefly.

‖ Contains cardamom and cinnamon, āā 2 %, caraway 1 %.

		Gm. Cc.

Caryophyl'lus. — CLOVES. The unexpanded flowers of Eugenia aromatica. A small tree (nat. ord. Myrtaceæ). East Indies.

Caryophyllus, powdered,	gr. v.–x.	0.33–0.65
Oleum Caryophyl'li,	♏ ij.–vi.	0.12–0.36

Cascaril'la.—CASCARILLA. The bark of Croton Eluteria A shrub (nat. ord. Euphorbiaceæ). West Indies.

Cascarilla, powdered,	gr. xx.– ʒ ss.	1.30–1.95

Cas'sia Fis'tula.—[Purging Cassia.] The fruit of Cassia Fistula. A tree (nat. ord. Leguminosæ). Egypt and India. Cultivated elsewhere.

Cassia Fistula,	ʒ i.–ij.	3.90–7.80
Confectio Sennæ.	See Senna.	

Casta'nea.—CHESTNUT. The leaves of Castanea dentata. A tree (nat. ord. Cupuliferæ). Indigenous.

Extractum Casta'neæ Fluidum,	ʒ i–ij.	3.75–7.50

℗ Casto'reum.—CASTOR. The dried preputial follicles and their secretion, obtained from the Beaver, Castor Fiber.

Castoreum,	gr. x.– ʒ ss.	0.65–1.95
℗ Tinctura Casto'rei,	ʒ ss.–ij.	1.90–7.50

Cat'echu.—CATECHU. An extract prepared from the wood of Acacia Catechu. A small tree (nat. ord. Leguminosæ). East Indies.

Catechu, powdered,	gr. x.– ʒ ss.	0.65–1 95
Trochis'ci Catechu,	gr. i. in each.	
Tinctura Catechu Composita,*	ʒ ss.–iij.	1.90–11.25

Caulophyl'lum.—BLUE COHOSH. The rhizome and rootlets of Caulophyllum thalictroides. An indigenous plant (nat. ord. Berberidaceæ).

Ce'ra Al'ba.—WHITE WAX. Yellow wax, bleached.

Ceratum.	See Adeps.

Cera Fla'va.—YELLOW WAX. A peculiar concrete substance prepared by Apis mellifica (the honey bee).

Unguentum.	See Adeps.

* Catechu 10, cinnamon 5 parts in 100.

Gm.
Cc.

Ce'rii Ox'alas.—OXALATE OF CERIUM. A white powder, odorless and tasteless.

Cerii Oxalas, gr. i.–ij. 0.06–0.13

Ceta'ceum.—SPERMACETI. A peculiar, concrete, fatty substance, obtained from Physeter macrocephalus (the sperm whale).

Ceratum Ceta'cei.*

Cetra'ria.—ICELAND MOSS. Cetraria islandica. This lichen is also abundant in New England.

Decoctum Cetra'riæ (1 in 20), ℥ ss.–ij. or more. 15.–60.

Chelido'nium.—CELANDINE. Chelidonium majus. A plant (nat. ord. Papaveraceæ). Europe and this country.

Chenopo'dium.—[American Wormseed. Jerusalem Oak.] The fruit of Chenopodium ambrosioides, variety anthelminticum. An indigenous plant (nat. ord. Chenopodiaceæ).

Oleum Chenopo'dii, dose for a child, ♏ iv.–viij. 0.24–0.50

Chimaph'ila.—PIPSISSEWA. The leaves of Chimaphila umbellata. A small evergreen plant (nat. ord. Ericaceæ). U. S. and elsewhere.

Extractum Chimaph'ilæ Fluidum, ʒ i. 3.75

Chira'ta.—CHIRETTA. The entire plant Swertia Chirata (nat. ord. Gentianeæ). Northern India.

Chirata, gr. xx. 1.30

Extractum Chira'tæ Fluidum, ʒ ss. 1.90

Tinctura Chiratæ (1 in 10), ʒ i.–ij. 3.75–7.50

Chlo'ral.—[Chloral Hydrate.] White crystals of a pungent odor and taste.

Chloral, gr. xv.–xxv. 1.–1.65

ΦCroton-Chloral.—[Butyl-chloral.]

Croton-chloral, gr. v. 0.33

Chlorofor'mum.—CHLOROFORM. A liquid produced by the action of Chlorine upon Alcohol. Is very volatile. (99%).

Aqua Chlorofor'mi, ʒ i.–iv. 3.70–14.75

* Spermaceti 10, white wax 35, olive oil 55 parts.

		Gm. Cc.
Emulsum Chlorofor'mi,*	℥ ss.–i.	15.–30.
Spiritus Chlorofor'mi (6 %),	♏ x.–ʒ i.	0.60–3.75

Linimentum Chloroformi (C. 3, Soap liniment 7).

Chlo'rum.—CHLORINE. The gas Chlorine is not official.

Aqua Chlo'ri (at least 0.4 % Cl.),	ʒ i.–℥ ss.	3.75–15
Liquor Sodæ Chlora'tæ,†	ʒ ss.–i.	1.90–3.75
Calx Chlora'ta,‡	gr. iij.–vi.	0.20–0.40

Chon'drus.—IRISH MOSS. [Carragheen.] Chondrus crispus and Gigartina mamillosa. A sea-weed. Coast of Europe and U. S.

℗ Decoctum Chon'dri (℥ ss. in O i),
℥ ss.–ij. or more. 15.–60.

Chrysarobi'num.—CHRYSAROBIN. A yellow crystalline powder, odorless and tasteless. Is a neutral principle, commonly misnamed Chrysophanic Acid, extracted from Goa-powder, a substance found deposited in the wood of Andira Araroba. A tree (nat ord. Leguminosæ). Brazil.

Chrysarobinum,	gr. x.–xxv.	0.65–1.56

Unguentum Chrysarobi'ni (1 in 10).

Cimicif'uga.—[Black Snakeroot. Black Cohosh.] The rhizome and rootlets of Cimicifuga racemosa. An indigenous plant (nat. ord. Ranunculaceæ).

Cimicifuga, powdered,	gr. xx.–ʒ i.	1.30–3.90
Extractum Cimicifugæ,	gr. iii.–v.	0.2–0.32
Extractum Cimicifugæ Fluidum,	ʒ ss.–i.	1.90–3.75
Tinctura Cimicifugæ (1 in 5),	ʒ i.–ij.	3.75–7.50

Cincho'na.—CINCHONA. [Peruvian Bark.] The bark of any species of Cinchona yielding at least 5 % of total alka-

* Chloroform 4, ol. amygdalæ exp. 6, and tragacanth 1.5 in 100.

† (Labarraque's solution.) Sodii carbonas 15, calx chlorata 7.5 parts in 100. Contains 2.6 % of available chlorine, and several chlorine compounds of sodium.

‡ (Chlorinated lime. Bleaching powder.) Contains at least 35 % of available chlorine. Is always to be given in solution.

Gm.
Cc.

loids and 2.5% of Quinine. A tree (nat. ord. Rubiaceæ). South America; cultivated in Ceylon, India, and elsewhere.

OFFICIAL ALKALOIDS.

Quini'na,*			
Quini'næ	Sulphas,†	gr. i.–xxiv.	0.06–1.50
	Bisul'phas,‡	Same dose as the Sulphate.	
	Hydrobro'mas,		
	Hydrochlo'ras,		
	Valeria'nas,	gr. i.–ij.	0.065–0.13
Quinidi'næ Sulphas,		Dose about ⅓ more than that of Quininæ Sulphas.	
Cinchoni'na,			
Cinchoni'næ Sulphas,			
Cinchonidi'næ Sulphas,			

OFFICIAL PREPARATIONS.

Extractum Cincho'næ,	gr. v.–xv.	0.33–1.
Extractum Cinchonæ Fluidum,	♏ v.–xv.	0.30–0.90
Tinctura Cinchonæ (1 in 5),	ʒ i.–ij.	3.75–7.50
Infusum Cinchonæ (1 in 16.6),	℥ ij.	60.

* Pleasant methods of exhibiting quinine to children too young to take pills:

a. In the form of quinine chocolates, containing 1 gr. tannate of quinine each. Now made by several firms.

b. Endermically by oleate of quinine, say 25% strong. Remember that oleates of alkaloids are not official, and are made by rubbing the *alkaloid* (not the salt) with oleic acid.

c. Hypodermically by carbamate of quinine.

d. Per rectum—in solution or suppositories.

e. Cinchonine mixture. Contains cinchonine (alkaloid) 12, sugar of milk 60, and sodii bicarb. 1 part. Is a white, practically tasteless powder. The alkali neutralizes any possible acid in the saliva, and the cinchonine is only soluble in an acid. Wash it down with water or milk, and later take an acid drink.

† Warburg's tinctura contains quinine sulphate, gr. ixss. in ʒ i.

‡ Exactly, this salt contains 13% less quinine than the sulphate.

Gm.
Cc.

THE OFFICIAL VARIETY OF CINCHONA IS:

Cinchona Ru'bra.—RED CINCHONA. The bark of the trunk of Cinchona succirubra, containing at least 5 % of its peculiar alkaloids.

Tinctura Cinchonæ Compos'ita,* ʒ i.–℥ ss. 3.75–15.

Cinnamo'mum Cassia.—CASSIA CINNAMON. The bark of the shoots of one or more undetermined species of Cinnamomum grown in China. A tree (nat. ord. Laurineæ).

Cinnamomum, gr. x.–xx. 0.65–1.30

Aqua Cinnamo'mi (oil of C. 1 in 500), used as a vehicle.

Oleum Cinnamomi, ♏ i.–iii. 0.06–0.18

Spiritus Cinnamomi (oil of C. 1 in 10), ♏ x.–xx. 0.60–1.25

Cinnamo'mum Saigon'icum.—SAIGON CINNAMON. The bark of an undetermined species of Cinnamomum. A tree (nat. ord. Laurineæ).

Cinnamomum Saigonicum, gr. x.–ʒ ss. 0.65–1.90

Cinnamomum Zeylan'icum.—CEYLON CINNAMON. The inner bark of the shoots of Cinnamomum Zeylanicum. A tree (nat. ord. Laurineæ).

Tinctura Cinnamomi (C. 1 in 10), ʒ i.–℥ ss. 3.75–15.

Pulvis Aromat'icus,† gr. x.–xx. 0.65–1.30

Extractum Aromaticum Fluidum,‡ ♏ x.–xx. 0.60–1.25

Coca (Erythroxylon, U. S. P., 1880).—The leaves of Erythroxylon Coca. A shrub (nat. ord. Lineæ). South America.

Extractum Cocæ Fluidum, ʒ i.–iv. 3.75–14.80

Cocainæ Hydrochloras, gr. ⅛–ii. 0.008–0.12

Coc'cus.—COCHINEAL. The dried female of Coccus cacti. An insect, of Mexico and Central America.

Coccus (dose for infant), gr. ⅓. 0.02

* (Huxham's tincture.) Contains red cinchona 10, bitter orange peel 8, serpentaria 2, glycerin 7.5 parts in 100.

† Cinnamon 7, ginger 7, cardamom 3, nutmeg 3.

‡ One Cc. represents the strength of one Gm. of aromatic powder.

		Gm. Cc.

Col'chici Ra'dix.—COLCHICUM ROOT. [Meadow Saffron Root.] The corm of Colchicum autumnale. A perennial bulbous plant (nat. ord. Liliaceæ). Europe and Northern Africa.

Extractum Colchici Radi'cis,	gr. i.–ij.	0.06–0.13
Extractum Colchici Radicis Fluidum,	♏ ij.–viij.	0.12–0.50
Vinum Colchici Radicis (1 in 2.5),	♏ x.– ʒ i.	0.60–3.75

Colchici Se'men.—COLCHICUM SEED. The seed of Colchicum autumnale (nat. ord. Liliaceæ).

Extractum Colchici Sem'inis Fl.,	♏ ij.–viij.	0.12–0.50
Tinctura Colchici Seminis, / Vinum Colchici Seminis,	(1 in 6.6), ʒ ss.–ij.	1.90–7.50

Collo'dium.—COLLODION. A solution of gun-cotton (Pyroxylin) in Ether and Alcohol.

Collodium, / Collodium Cantharidatum, / Collodium Flex'ile,* / Collodium Styp'ticum,†	External use.

Colocyn'this.—COLOCYNTH. [Bitter Cucumber.] The fruit of Citrullus Colocynthis, deprived of its rind. A plant (nat. ord. Cucurbitaceæ). Turkey, the Grecian Archipelago, and various parts of Asia and Africa.

Extractum Colocyn'thidis,	gr. iij.–v.	0.20–0.30
Extractum Colocynthidis Comp.,‡	gr. i.–xx.	0.06–1.30
Pilulæ Catharticæ Co.	See Cambogia.	
Pilulæ Catharticæ Vegetabiles,§	i.–v. pills.	

Coni'um.—SPOTTED HEMLOCK. The full-grown fruit of Conium maculatum, gathered while yet green. A plant (nat. ord. Umbelliferæ). Europe; naturalized in the U. S.

* Collodion 92, Canada turpentine 5, castor oil 3 parts.

† Tannic acid 20, ether 25, alcohol 5, collodion 50 parts.

‡ Ext. colocynth. 16, aloes 50, resin of scammony 14, cardamom 6, soap 14 parts.

§ Each pill contains: ext. colocynth comp., gr. i.; ext. hyoscyami and ext. jalapi, āā gr. ss.; ext. leptandra and resina podophylli, āā gr. ¼; oil of peppermint, ♏ ⅙.

		Gm. Cc.
Extractum Conii,*	gr. ss.–i.	0.03–0.06
Extractum Conii Fluidum,	♏ i.–v.	0.06–0.30
Φ Conine (a fluid, volatile alkaloid),	♏ ¼–¾	0.015–0.045

Convalla'ria.—LILY OF THE VALLEY. The rhizome and roots of Convallaria majalis. A plant (nat. ord. Liliaceæ). Europe and the southern U. S.

Extractum Convallariæ Fluidum,	♏ iij.–x.	0.20–0.60

Copa'iba.—COPAIBA. [Balsam of Copaiba.] The oleoresin of Copaifera Langsdorffii, and of other species of C. A tree (nat. ord. Leguminosæ). Brazil, and neighboring countries.

Copaiba,	♏ xx.–ʒ i.	1.25–3.75
Oleum Copa'ibæ,	♏ x.–xv.	0.60–0.90
Resina Copaibæ,	gr. x.–xx.	0.65–1.30
Massa Copaibæ,†	gr. x.–xx.	0.65–1.30

Corian'drum.—CORIANDER. The fruit of Coriandrum sativum. A plant (nat. ord. Umbelliferæ). Europe.

Coriandrum, powdered,	gr. xx.–ʒ i.	1.30–3.90
Oleum Corian'dri,	used for flavoring.	

Creoso'tum.—CREOSOTE. A product of the distillation of wood-tar. It is a colorless, oleaginous liquid, with a smoky odor and caustic, burning taste.

Creosotum,	♏ i.–iij.	0.06–0.18
Aqua Creoso'ti (1 in 100),	ʒ i.–℥ ss.	3.75–15.

Creta.—CHALK. See Calcium.

Cro'cus.—SAFFRON. The stigmas of Crocus sativus. A perennial plant (nat. ord. Irideæ). Greece and Asia Minor; cultivated elsewhere.

Crocus (chiefly to color and flavor),	gr. x.–ʒ ss.	0.65–1.95
Tinctura Croci (10 %).	ʒ i.–iij.	3.70–11.10

* Made from the fruit, instead of the leaves as formerly, and is "considerably stronger."

† Copaiba 94, magnesia 6 parts. Is the Pil. Copaibæ of 1870. Each contained gr. 4.8 of copaiba.

		Gm. Cc.
Cube'ba.—CUBEB. The unripe fruit of Piper Cubeba. A climbing, perennial plant (nat. ord. Piperaceæ). East Indies.		
Cubeba, powdered,	ʒ ss.–iij.	1.90–11.65
Extractum Cube'bæ Fluidum,	♏ x.–xl.	0 60–2.50
Oleum Cubebæ,	♏ xv.–ʒ ss.	0.90–1.90
Oleoresina Cubebæ,	♏ x.–xv.	0.60–0.90
Tinctura Cubebæ (1 in 5),	ʒ ii.–vi.	7.50–22.50
Trochis'ci Cubebæ,	1 = gr. ss. of the Oleoresin.	
Cu'prum.—COPPER. The metal Copper is not official.		
Cupri Sulphas (Blue Vitriol. Blue Stone),	gr. ¼–v.	0.16–0.33
Cusso.—KOUSSO (Braye'ra, 1880). The female inflorescence of Hagenia Abyssinica. A tree (nat. ord. Rosaceæ).		
Cusso, powdered,	℥ ss.	15.
Extractum Cusso Fluidum,	℥ ss.–i.	15–30
Cypripe'dium.—LADIES' SLIPPER. [Moccasin Plant.] The rhizome and root of Cypripedium pubescens, and of C. parviflorum (nat. ord. Orchideæ). Indigenous.		
Extractum Cypripe'dii Fluidum,	♏ xv.	0.90
Digital'is.—FOXGLOVE. The leaves of Digitalis purpurea, from plants of the second year's growth (nat. ord. Scrophularineæ). Europe, cultured in the U. S.		
Digitalis, powdered,	gr. i.	0.06
Extractum Digitalis,	gr. ¼	0.016
Extractum Digitalis Fluidum,	♏ i.–ij.	0.06–0.12
Tinctura Digitalis (1 in 6.6),	♏ x.–xx.	0.60–1.25
Infusum Digitalis,*	ʒ i.–℥ ss.	3.75–15.
Φ Digitalin,†	gr. $\frac{1}{60}$	0.0015
Dulcama'ra.—BITTERSWEET. The young branches of Solanum Dulcamara. A climbing shrub (nat. ord. Solanaceæ). Europe and N. America.		
Extractum Dulcama'ræ Fluidum,	ʒ ss.–i.	1.90–3.75

* (Digitalis 1 in 66.6.) ʒ i. = about gr. vij. of D.

† Digitalin of commerce is a complex body, of uncertain strength.

		Gm. Cc.

Elas'tica.—INDIA-RUBBER (Caoutchouc). The prepared milk-juice of various species of Hevea (nat. ord. Euphorbiceæ).

Elateri'num.—ELATERIN. A neutral principle extracted from Elaterium, a substance deposited by the juice of the fruit of Ecbalium Elaterium (Squirting Cucumber). A plant (nat. ord. Cucurbitaceæ). The south of Europe.

Elaterinum,*	gr. $\frac{1}{20}$–$\frac{1}{16}$	0.003–0.004
Tritura'tio Elateri'ni (1 in 10),	gr. $\frac{1}{2}$–$\frac{5}{8}$	0.03–0.04
Φ Clutterbuck's Elaterium,	gr. $\frac{1}{8}$	0.008

Ergo'ta.—ERGOT. [Spurred Rye. Secale Cornutum.] The sclerotium of Claviceps purpurea (a fungus) replacing the grain of Secale cereale (rye). (Nat. ord. Gramineæ.)

Ergota, powdered,	ʒ ss.–ij.	1.90–7.50
Extractum Ergo'tæ,†	gr. v.–ʒ ss.	0.33–1.90
Extractum Ergotæ Fluidum,	ʒ ss.–℥ ss.	1.90–15.
Vinum Ergotæ (1 in 6.6)	ʒ ij.–℥ ij.	7.50–60.
Φ Ergotin, Bonjean's,‡	gr. v.–x.	0.33–0.65

Eriodic'tyon.—The leaves of Eriodictyon glutinosum (nat. ord. Hydrophyllaceæ).

Eriodictyon,	gr. xv.–ʒ ss.	1.–2.
Extractum Eriodictyi Fluidum,	♏ xv.–ʒ i.	0.90–3.75

Eucalyp'tus.—EUCALYPTUS. The leaves of Eucalyptus globulus, collected from rather old trees (nat. ord. Myrtaceæ). Australia and Tasmania.

Extractum Eucalyp'ti Fluidum,	♏ v.–x.	0.30–0.60
Oleum Eucalypti,	♏ x.–xv.	0.60–0.90
Eucalyp'tol,§	♏ v.–ʒ ss.	0.33–1.85

* Elaterinum, when pure, is crystalline. Dose, gr. $\frac{1}{16}$, repeated in four hours, if necessary. (*N. Y. Med. Journal*, vol. xxxvii., No. 19.)

† Is five times the strength of the fl. ext.

‡ Is a purified extract; about ten or eleven times the strength of Ergot.

§ Neutral body obtained from oleum eucalyptol.

		Gm. Cc.
Euon'ymus.—WAHOO. [Spindle-tree. Burning Bush.] The bark of the root of Euonymus atropurpureus. An indigenous shrub (nat. ord. Celastrineæ).		
Extractum Euon'ymi,	gr. i.–iij.	0.06–0.20
Eupato'rium.—THOROUGHWORT. [Boneset. Indian Sage.] The leaves and flowering tops of Eupatorium perfoliatum. An indigenous plant (nat. ord. Compositæ).		
Eupatorium, powdered,	gr. xx.–ʒ ss.	1.30–1.95
Extractum Eupato'rii Fluidum,	♏ xx.–ʒ i.	1.25–3.75
Fel Bo'vis.—OX GALL. The fresh gall of Bos Taurus.		
Fel Bovis Purifica'tum,	gr. v.–x.	0.33–0.65

Fer'rum.—IRON, Metallic Iron, in the form of fine, bright, and non-elastic wire.

Iron is official:

I. IN THE METALLIC STATE.

Ferrum Reduc'tum (Quevenne's Iron, Iron by Hydrogen), gr. iij.–vi. 0.20-0.40

II. OXIDIZED.

Antidote to Arsenous Acid	Ferri Ox'idum Hydra'tum, freshly made, Ferri Oxidum Hydratum cum Magnesia,* freshly made, Φ Ferrum Dialysa'tum,†	℥ ss. or more, frequently repeated.	15.

Trochis'ci Ferri, Hydrated Oxide, gr. v. in each, 1–6 troches.

Emplastrum Ferri,‡ (Strengthening Plaster).

* Preferred by the U. S. Dispensatory and by Wood.

† Recommended by Wood: "Seems the best antidote at command." "Exact chem. composition uncertain—it is possible that the iron exists as a basic oxychloride." Dose as a chalybeate, gtt. xx -xl.

‡ Ferric hydrate 9, olive oil 5, Burgundy pitch 14, lead plaster 72 parts in 100.

		Gm. Cc.

III. IN SALINE COMBINATION.

Liquor Ferri Aceta'tis (⅓ Ferric Acetate),	♏ij.–x.	0.12–0.60
Tinctura Ferri Acetatis,*	♏ xx.–ʒ i.	1.25–3.75
Liquor Ferri et Ammo'nii Acetatis,†	℥ ss.–i.	15.–30.
Ferri Carbo'nas Sacchara'tus,	gr. v.–ʒ ss.	0.33–1.95
Massa Ferri Carbona'tis,‡	gr. iij.–v.	0.20–0.33
Mistura Ferri Composita,§	℥ i.–ij.	30.–60.
Pilulæ Ferri Carbonatis (Blaud's Pills). Each 5-gr. pill contains Ferri Sulph. gr. iiss. and Potass. Carb. gr. 1¼.		
Ferri Chlo'ridum, very rarely used internally.		
Liquor Ferri Chloridi,‖	♏ ij.–x.	0.12–0.60
Tinctura Ferri Chloridi,¶	♏ x.–ʒ ss.	0.60–1.90
Ferri Ci'tras,	gr. v.	0.33
Liquor Ferri Citra'tis,	♏ ij. = gr. i.	
Vinum Ferri Citratis,**	ʒ i.	3.75
Ferri et Ammo'nii Citras,††	gr. v.	0.33
Ferri et Quini'næ Citras (12 % Quinine).	gr. v.	0.33
Ferri et Quininæ Citras Solubilis,	gr. iij.–x.	0.20–0.65
Vinum Ferri Ama'rum,‡‡	ʒ ij.–℥ ss.	7.50–15.
Ferri et Strychni'næ Citras (1% Strych.),	gr. iij.–v.	0.20–0.33

* Liq. ferri acet. 5, alcohol 3, acetic ether, 2 parts.

† (Basham's mixture.) Tinct. ferri chlor. 2, ac. acetic. dil. 3, liq. ammon. acet. 20, elixir aromat., syrup, and water ad 100 parts.

‡ (Vallet's mass.) Contains nearly half its weight of ferrous carbonate, with sugar and honey.

§ (Griffith's mixture.) ℥ i. contains about gr. 9 of myrrh, gr. 3 sulphate of iron, and gr. 4 carbonate of potass.; with sugar, spt. of lavender, and rose water.

‖ 37.8 % ferri chloridum.

¶ Liq. ferri chloridi, 25 in 100.

** (Contains ferri et ammonii citras, 4 %.) ʒ i. = about gr. 2¼ of the iron salt.

†† Give in solution rather than pills, as the ammonia makes pills too soft.

‡‡ (Contains ferri et quininæ citras solubilis, 5 %.) ʒ i. = about gr. 2¼ of the iron salt, and about gr. ¼ of quinine.

		Gm. Cc.
Ferri et Ammonii Tar'tras, / Ferri et Potassii Tartras,	gr. x.–ʒ ss.	0.65–1.95
Ferri Hypophos'phis, / Syrupus Hypophosphi'tum cum Ferro,	see Phosphorus.	
Ferri Iod'idum Sacchara'tum,	gr. ij.–v.	0.13–0.33
Pilulæ Ferri Iod'idi,*	1–3 pills.	
Syrupus Ferri Iodidi,†	♏ xv.–ʒ ss.	0.90–1.90
Ferri Lactas,	gr. i.–v,	0.06–0.33
Liquor Ferri Nitra'tis (6 % Ferri Nitr.),	♏ v.–xv.	0.30–0.90
Ferri Phosphas Solubilis,	gr. v.–x.	0.33–0.65
Syrupus Ferri Quininæ et Strychninæ Phosphatum.‡	ʒ i.	3.75
Ferri Pyrophos'phas Solubilis,	gr. ij.–v.	0.13–0.33
Ferri et Ammonii Sulphas (Iron Alum),	gr. v.–x.	0.33–0.65
Ferri Sulphas,§ / Ferri Sulphas Granulatus,	gr. i.–ij.	0.06–0.13
Ferri Sulphas Exsiccatus,	gr. iij. = gr. v. of Ferri Sulph.	
Liquor Ferri Subsulpha'tis,‖ / Liquor Ferri Tersulphatis.¶	♏ iij.–vi.	0.18–0.36
Ferri Valeria'nas,	gr. i.	0.06

Fi'cus.—FIG. The fleshy receptacle of Ficus Carica (a tree, nat. ord. Urticaceæ), bearing fruit upon its inner surface. The Levant; cultivated in the south of Europe and elsewhere.

Is an ingredient of Confectio Sennæ.

Fœnic'ulum.—FENNEL. The fruit of Fœniculum capil-

* (Blancard's pills.) Each contains about gr. i. of iodide of iron, and gr. 0.2 of reduced iron.

† 10% ferrous iodide.

‡ ʒ i. contains about gr. i. of soluble ferric phosphate, gr. ii. of quinine sulph., gr. iii. of phosphoric ac., and gr. $\frac{1}{60}$ of strychnine.

§ (Green vitriol.) The impure sulphate is called copperas.

‖ (Monsel's solution.) Contains 43.7% basic ferric sulphate (= 13.6% of iron).

¶ Contains 28.7% normal ferric sulphate. Is used in making ferri oxidum hydratum.

		Gm. Cc.
laceum. A plant (nat. ord. Umbelliferæ). Europe and Asia ; cultivated in the U. S.		
Fœniculum, powdered,	gr. xx.–ʒ ss.	1.30–1.95
Aqua Fœnic'uli (oil 1 in 500),	used as a vehicle.	
Oleum Fœniculi,	♏ v.–xv.	0.30–0.90

Fran'gula.—BUCKTHORN. The bark of Rhamnus Frangula, collected at least one year before being used. A shrub (nat. ord. Rhamneæ). Europe and Russian Asia.

Extractum Fran'gulæ Fluidum,	♏ x.–xx.	0.60–1.25

Gal'la.—NUTGALL [Galls.] Excrescences on Quercus lusitanica, *var.* infectoria (the dyer's oak, nat. ord. Cupuliferæ) ; a small tree or shrub of Asia Minor chiefly), caused by the punctures and deposited ova of Cynips Gallæ tinctoriæ (an insect).

Tinctura Gallæ (1 in 5),	ʒ i.–iij.	3.75–11.25
Unguentum Gallæ (1 in 10).		

Gelsem'ium.—YELLOW JASMINE. The rhizome and rootlets of Gelsemium sempervirens. A climbing plant (nat. ord. Loganiaceæ). The Southern United States.

Extractum Gelsem'ii Fluidum,	♏ ij.–iij.	0.12–0.18
Tinctura Gelsemii (1 in 6.66),	♏ x.–xx.	0.60–1.25

Gentia'na.—GENTIAN. The root of Gentiana lutea. A plant (nat. ord. Gentianeæ). Mountainous regions of Europe.

Extractum Gentia'næ,	gr. ij.–x.	0.13–0.65
Extractum Gentianæ Fluidum,	♏ x.–ʒ ss.	0.60–1.90
Tinctura Gentianæ Composita,*	ʒ i.–ij.	3.75–7.50

Gera'nium.—CRANESBILL. The rhizome of Geranium maculatum. An indigenous plant (nat. ord. Geraniceæ).

Geranium, powdered,	gr. xx.–ʒ ss.	1.30–1.95
Extractum Gera'nii Fluidum,	ʒ ss.–i.	1.90–3.75

Glonoi'num.—GLONOIN, NITROGLYCERIN. A clear, oily, explosive liquid produced by the action of nitric and sulphuric acids upon glycerin. Official only in a 1 % alcoholic solution.

* Gentian 10, bitter orange peel 4, cardamom 1 part in 100.

		Gm. Cc.
Spiritus Glenoi'ni (1 %),	♏ ss.–iii.	0.03–0.18

Glyceri'num.—GLYCERIN. A liquid obtained by the decomposition of fats and fixed oils, and containing not less than 95 % of abs. glycerin. Is colorless, inodorous, and of a sweet taste.

Glycerinum,	♏ x.– ʒ i. or more	0.60–3.75
Glyceritum Acidi Carbolici.	See Acid. Carbolic.	
Glyceritum Acidi Tannici.	See Acid. Tannicum.	
Glyceritum Amyli.	See Amylum.	
Glyceritum Boroglycerini.	See Acid. Boric.	
Glyceritum Hydrastis.	See Hydrastis.	
Glyceritum Vitelli.	See Vitellus.	

Suppositoria Glycerini (ʒ iss. in each).

Glycyrrhi'za.—LIQUORICE. The root of Glycyrrhiza glabra. A plant (nat. ord. Leguminosæ). The south of Europe, Barbary, Syria, and Persia.

Glycyrrhiza, powdered, as excipient for pills.

Extractum Glycyrrhi'zæ,
Extractum Glycyrrhizæ Purum,
Extractum Glycyrrhizæ Fluidum, } for flavoring.

Trochisci Glycyrrhizæ et Opii.	See Opium.	
Pulvis Glycyrrhizæ Compositus.	See Senna.	
Mistura Glycyrrhizæ Composita,*	℥ ss.	15.
Glycyrrhizi'num Ammonia'tum,	gr. v.–xv.	0.33–0.90

Gossyp'ii Radicis Cortex.—The bark of the root of Gossypium herbaceum. See Gossypium Purificatum.

Extractum Gossypii Radicis Fluidum,	ʒ ss.–i.	1.90–3.75

Gossyp'ium Purificatum.—[Purified Cotton, Absorbent C.] The hairs of the seed of Gossypium herbaceum, and of other species of G., freed from adhering impurities, and deprived of fatty matter. A plant (nat. ord. Malvaceæ). Asia; cultivated in the southern U. S. and elsewhere.

* (Brown mixture) = Ext. glycyrr. pur., acacia, sugar, spt. ætheris nitr., āā ʒ 3; tinct. opii camph., 12; vin. antimonii, 6; aqua ad 100 parts.

		Gm. Cc.
Pyroxyli'num (Gun Cotton).*	Used in making Collodium.	
Oleum Gossyp'ii Sem'inis.†	Pharm use.	

Grana'tum.—POMEGRANATE. The bark of the root of Punica Granatum. A small tree (nat. ord. Lythrarieæ). Shores of the Mediterranean, Persia, China, Japan, and elsewhere.

Φ Decoctum Grana'ti (℥ i. : O i.).	℥ i.	30.

Grinde'lia.—GRINDELIA. The leaves and flowering tops of Grindelia robusta, and of Grindelia squarrosa. A plant (nat. ord. Compositæ). N. and S. America.

Extractum Grindeliæ Fluidum,	ʒ ss.–i.	1.90–3.75

Gua'iaci Lig'num.—GUAIACUM WOOD. The heart-wood of Guaiacum officinale, and of G. sanctum (nat. ord. Zygophylleæ). Trees, of West Indies.

Little used ; may be given in decoction.

Gua'iaci Resi'na.—GUAIAC. The resin of the wood of G. officinale. (See Guaiaci Lignum.)

Guaiaci Resi'na, powdered,	gr. x.–ʒ ss.	0.65–1.95
Tinctura Guaici (1 in 5),	ʒ i.–ij.	3.75–7.50
Tinctura Guaici Ammonia'ta,‡	ʒ i.–ij.	3.75–7.50

An ingredient of Pil. Antimonii Compos.

Guara'na.—GUARANA. A dried paste prepared from the crushed or ground seeds of Paullinia sorbilis. A woody climber (nat. ord. Sapindaceæ). Brazil.

Guarana,	ʒ i.–ij.	3.90–7.80
Extractum Guara'næ Fluidum,	ʒ i.–ij	3.75–7.50

Hæmatox'ylon.—LOGWOOD. The heart-wood of Hæmatoxylon campechianum. A tree (nat. ord. Leguminosæ). Campeachy, aud elsewhere in tropical America.

Extractum Hæmatox'yli,	gr. x.–ʒ ss.	0.65–1.95

Hamame'lis.—WITCHHAZEL. The fresh leaves of Hamamelis virginiana collected in autumn. An indigenous shrub (nat. ord. Hamamelaceæ).

* Cotton treated with nitric and sulphuric acids.

† Expressed from cotton-seed.

‡ Guaiac 1, spiritus ammoniæ aromat. 4 parts.

		Gm. Cc.
Extractum Hamamel'idis Fluidum,	ʒ ss.	1.90

Hedeo'ma.—PENNYROYAL. The leaves and tops of Hedeoma pulegioides. An indigenous plant (nat. ord. Labiatæ).

Oleum Hedeo'mæ,	♏ ij.–x.	0.12–0.60

Hu'mulus.—HOPS.* The strobiles of Humulus lupulus. A climbing plant (nat. ord. Urticaceæ). Europe and N. America.

Tinctura Hu'muli (1 in 5),	ʒ i.–iij.	3.75–11.25

Lupuli'num. The glandular powder separated from Hops.

Extractum Lupuli'ni Fluidum,	♏ x.–xv.	0.60–0.90
Oleoresi'na Lupulini,	gr. ij.–v.	0.13–0.33

Hydrar'gyrum.—MERCURY.† [Quicksilver.] A shining, silver-white metal, liquid at temperatures above — 40° F. Mercury is official:

I. IN THE METALLIC STATE.

Massa Hydrar'gyri (Blue Mass),‡	gr. i.–xv.	0.06–1.
Hydrargyrum cum Creta,§	gr. v.–ʒ ss.	0.33–1.95
Unguentum Hydrargyri (Blue Ointment),	Mercury 5 in 10	
Emplastrum Hydrargyri,	Mercury 3 in 10	
Emplastrum Ammoni'aci cum Hydrargyro.‖		

II. OXIDIZED.

Hydrargyri Ox'idum Flavum (Yellow Precipitate), to make	
Unguentum Hydrargyri Oxidi Flavi,	1 in 10
Oleatum Hydrargyri,¶	2 in 10

* Wood recommends much larger doses of hops and lupulin than those given in the text.

† The corrosive chloride and the cyanide are, practically, the only soluble official preparations of mercury.

‡ Mercury ⅓, honey of rose ⅓, marshmallow, licorice, and glycerin ⅓.

§ (Gray powder.) Mercury 38, prepared chalk 57, clarified honey 10 parts. Gr. viij. contain about gr. iij. of mercury.

‖ About ⅓ mercury and ⅔ ammoniac.

¶ Yellow oxide 2, oleic acid 8 parts.

		Gm. Cc.
Hydrargyri Oxidum Rubrum (Red Precipitate), to make Unguentum Hydrargyri Oxidi Rubri,		1 in 10

III. AS MERCUROUS CHLORIDE.

Hydrargyri Chlo'ridum Mite (Calomel),	gr. ss.–xv.	0.03–1.
Pilulæ Antimonii Comp. See Antimonium.		
Pilulæ Catharticæ Comp. See Cambogia.		
Φ Lotio Hydrargyri Nigra. (Black Wash).*		

IV. AS MERCURIC CHLORIDE.

Hydrargyri Chloridum Corrosi'vum,†	gr. $\frac{1}{12}$–⅛	0.005–0.007
Φ Lotio Hydrargyri Flava (Yellow Wash).‡		
Hydrargyrum Ammonia'tum (White Precipitate), to make Unguentum Hydrargyri Ammoniati,		1 in 10

V. COMBINED WITH IODINE.

Hydrargyri Io'didum Rubrum,	gr. $\frac{1}{16}$–¼	0.004–0.016
Liquor Arseni et Hydrargyri Iodidi. See Arsenum.		
Hydrargyri Iodidum Flavum,§	gr. ¼–i,	0.016–0.06

VI. COMBINED WITH CYANOGEN.

Hydrargyri Cyan'idum,	gr. $\frac{1}{16}$–⅛	0.004–0.008

VII. OXIDIZED AND COMBINED WITH ACIDS.

Liquor Hydrargyri Nitra'tis,‖	Caustic.
Unguentum Hydrargyri Nitratis (Citrine ointment).¶	

* [Calomel ʒ i., lime-water O i.] Black oxide of mercury is formed.

† Corrosive sublimate. Bichloride of mercury.

‡ [Corrosive sublimate ʒ ss., lime-water O i.] Yellow oxide of mercury is formed.

§ Should not be given in combination with potass. iodidum, as the biniodide and metallic mercury result.

‖ Red oxide of mercury 40, nitric ac. 45, water 15 parts. The solution contains about 60 % of mercuric nitrate, with 11 % free nitric acid.

¶ Mercury 7, nitric ac. 17, lard oil 76 parts.

		Gm. Cc.
Inula, powdered,	gr. xx.–ʒ i.	1.30–3.90

Iodofor'mum. — IODOFORM. A lemon-yellow, crystalline powder, with a saffron-like, penetrating odor, and iodine-like taste.

Iodoformum,*	gr. i.–iij.	0.06–0.20
Unguentum Iodofor'mi,	1 in 10.	

Io'dum.—IODINE. A solid, bluish-black, non-metallic element, obtained principally from the ashes of sea-weeds.

Iodum,	not given internally in solid form.	
Unguentum Io'di.†		
Ammo'nii Io'didum,‡	gr. iij.–v.	0.20–0.33
Potas'sii Iodidum,	g. ij.–x., or more.	0.13–0.65
Unguentum Potassii Iodidi.§		
So'dii Iodidum,	gr. v.–xx., or more.	0.33–1.30
Zinci Iodidum,	gr. ss.–ij.	0.03–0.13
Argen'ti Iodidum.	See Argentum.	
Arse'ni Iodidum.	See Arsenum.	
Plumbi Iodidum.	See Plumbum.	
Strontii Iodidum.	See Strontium.	
Sul'phuris Iodidum.	See Sulphur.	
Liquor Iodi Compos'itus,‖	♏ v.–xv.	0.30–0.90
Tinctura Iodi (7 %),¶	♏ iij.–x.	0.18–0.60
Φ Churchill's Tincture,**	external use.	
Syrupus Ac'idi Hydriod'ici,††	♏ xx.–xl.	1.25–2.50

* Is 29 parts iodine in 30. The volatile oils probably best disguise the odor of iodoform.

† Iodum 4, potass. iodidum 1 part in 100.

‡ The iodides of ammonium, potassium, sodium, and zinc are deliquescent; potass. iodidum but slightly so.

§ Contains 12 parts potass. iodidum in 100.

‖ (Lugol's solution.) Iodum 5, potass. iodidum 10 parts in 100. ♏ xx. = about gr. i. of iodine.

¶ ♏ xv. = about gr. i. of iodine. Chiefly used externally. When the *fresh* tincture is diluted with water, the iodine is precipitated.

** Potass. iodidum, ʒ i.; iodum, ʒ v.; aqua, ℥ i.; spts. vin. rectif., ℥ iij.

†† Contains 1 % of absolute hydriodic acid.

		Gm. Cc.

Ipecacuan'ha.—IPECAC. The root of Cephaëlis Ipecacuanha. A small, shrubby plant (nat. ord. Rubiaceæ.) Brazil

Ipecacuanha, powdered,	gr. ¼–3 ss.	0.016–1.95
Extractum Ipecacuan'hæ Fluidum,	♏¼–3 ss.	0.015–1.90
Pulvis Ipecacuanhæ et Opii,*	gr. v.–xv.	0.33–1.
Trochis'ci Ipecacuanhæ,	1 = gr. ¼.	
Trochisci Morphi'næ et Ipecacuanhæ,†	1 = Ip. gr. $\frac{1}{12}$.	
Tinctura Ipecacuanhæ et Opii,‡	♏v.–xv.	0.30–0.90
Syrupus Ipecacuanhæ (Fl. Ex. 5 in 100),	♏x.–ʒ ss.	0.60–15.
Vinum Ipecacuanhæ (Fl. Ext. 1 in 10), dose about that of the syrup.		

I'ris.—BLUE FLAG. The rhizome and roots of Iris versicolor (nat. ord. Irideæ). An indigenous species of flag.

Iris, powdered,	gr. x.–xx.	0.65–1.60
Extractum Ir'idis,	gr. i.–ij.	0.06–0.13
Extractum Iridis Fluidum,	♏v.–x.	0.30–0.60

Jala'pa.—JALAP. The tuberous root of Ipomoea Jalapa. A plant (nat. ord. Convolvulaceæ). Mexico.

Jalapa, powdered,	gr. xv–3 ss.	1. –1.95
Extractum Jalapæ,	gr. ii.–v.	0.12–0.32
Resina Jalapæ,	gr. ij.–v.	0.13–0.33
Pulvis Jalapæ Compositus,§	ʒ ss.–i.	1.95–3.90
Pil. Catharticæ Comp.	See Cambogia.	
Pilulæ Catharticæ Vegetabiles.	See Colocynth.	

Ju'glans.—BUTTERNUT. The inner bark of the root of Juglans cinerea, collected in autumn. An indigenous tree (nat. ord. Juglandaceæ).

Extractum Juglan'dis,	gr. v.–x	0.33–0.65

Kama'la.—KAMALA. [Rottlera.] The glands and hairs from the capsules of Mallotus philippinensis. A small

* (Dover's powder.) Ipecac 1, opium 1, sugar of milk 8 parts.
† 1 = ipecac gr $\frac{1}{12}$, morph. sulph. gr. $\frac{1}{40}$.
‡ ♏ i. = gr. i. of Dover's powder.
§ About ⅓ jalapa and ⅔ potass. bitartras.

		Gm. Cc.
tree (nat. ord. Euphorbiceæ). Abyssinia, East Indies, China, Australia, and elsewhere.		
Kamala, suspended in syrup or mucilage,	ʒ i.–ij.	3.90–7.80

Ki'no.—KINO. The inspissated juice of Pterocarpus Marsupium. A tree (nat. ord. Leguminosæ). East Indies.

Kino, powdered,	gr. x.–ʒ ss.	0.65–1.95
Tinctura Kino (1 in 10),	ʒ i.–ij.	3.75–7.50

Krameria.—RHATANY. The root of Krameria triandra, and of K. Ixiná. Shrubs (nat. ord. Polygaleæ). Peru.

Krameira, powder,	gr. xx.–ʒ ss.	1.30–1.95
Trochisci Krame'riæ,	1 = gr. i.	0.06
Extractum Krameriæ,	gr. x.–xx.	0.65–1.30
Extractum Krameriæ Fluidum,	♏x.–ʒ i.	0.60–3.75
Syrupus Krameriæ (Fl. Ext. about ½),	ʒ i.–iij.	3.75–11.25
Tinctura Krameriæ (1 in 5),	ʒ i.–℥ ss.	3.75–15.

Lactuca'rium.—LACTUCARIUM. [Lettuce-opium.] The concrete milk-juice of Lactuca virosa. A plant (nat. ord. Compositæ). Europe.

Lactucarium, powdered,	gr. v.–xx.	0.33–1.30
Tinctura Lactucarii,	♏x.–ʒ i.	0.62–3.70
Syrupus Lactucarii (Tincture 1 in 10),	ʒ ij.–iij.	7.50–11.25

Lap'pa.—BURDOCK. The root of Arctium Lappa. A plant (nat. ord. Compositæ). Europe. Naturalized in the U. S.

Extractum Lappæ Fluidum,	♏xv.–ʒ i.	0.92–3.70

Leptan'dra.—LEPTANDRA. [Culver's Root.] The rhizome and rootlets of Veronica virginica. An indigenous plant (nat. ord. Scrophularineæ).

Leptandra, powdered,	gr. x.–ʒ i	0.65–3.90
Extractum Leptan'dræ,	gr. x.–ʒ ss.	0.65–1.95
Extractum Leptandræ Fluidum,	♏x.–ʒ i.	0.60–3.75
Pilulæ Catharticæ Vegetabiles.	See Colocynth.	

Limo'nis Cortex.—LEMON PEEL. The rind of the recent fruit of Citrus Limonum. A tree (nat. ord. Rutaceæ). Asia. Cultivated in most tropical countries.

		Gm. Cc.
Oleum Limonis, Spiritus Limonis.*	For flavoring.	
Syrupus Acidi Citrici.	See Citric Acid.	

Limonis Succus.—LEMON JUICE. The freshly expressed juice of the ripe fruit of Citrus Limonum.

Li'num.—FLAXSEED [Linseed.] The seed of Linum usitatissimum (common flax) (nat. ord. Lineæ).

Oleum Lini,†	℥ i.	30.

Lith'ium.—LITHIUM.‡ The metal Lithium is not official.

Lith'ii Ben'zoas,	gr. x.–ʒ ss.	0.65–1.95
Lithii Car'bonas,	gr. v.–xv.	0.33–1.
Lithii Ci'tras,	gr. x.–ʒ ss.	0.65–1.95
Lithii Citras Effervescens,	gr. x.–ʒ ss.	0.65–1.95
Lithii Salicy'las,	gr. xx.–xl.	1.30–2.60
Lithii Bromi'dum.	See Bromum.	

Lobe'lia.—LOBELIA [Indian Tobacco]. The leaves and tops of Lobelia inflata, collected after a portion of the capsules have become inflated. An indigenous plant (nat. ord. Lobeliaceæ).

Extractum Lobe'liæ Fluidum,	♏i.–v.	0.06–0.30
Tinctura Lobeliæ (1 in 5),	♏xv.–ʒ i.	1.–3.75

Lycopo'dium.—LYCOPODIUM. The sporules of Lycopodium clavatum (club-moss), and of other species of L. A plant (nat. ord. Lycopodiaceæ). Europe and indigenous.

Lycopodium.	External application, and pharm use.

Ma'cis.—MACE. The arillus of the fruit of Myristica fragrans (nat. ord. Myristicaceæ). See Myristica.

Macis, powdered,	gr. v.–xx.	0.33–1.30

Magne'sium.—MAGNESIUM. The metal Magnesium is not official.

* (Essence of lemon.) Oil 5, grated peel 5 in 100.

† May be used in making linimentum calcis.

‡ The citrate, bromide, and salicylate are deliquescent. All the official lithium salts are soluble in water; the carbonate sparingly so.

		Gm. Cc.
Magnesia (light M.),* Magnesia Pondero'sa (heavy M.),	ʒ ss.-iij.	1.95–12.
Magne'sii Carbo'nas,	ʒ ss.-℥ ss.	1.95–15.
Magnesii Citras Effervescens,†	ʒ i.-℥ ss.	3.90–15.
Liquor Magnesii Citra'tis,‡	℥ ij.-xij.	60.-375.
Magnesii Sulphas (Epsom Salt),	℥ ss.-i.	15.-30.

Man'ganum.—MANGANESE. The metal Manganum is not official.

Man'gani Dioxidum,	gr. iij.-xx.	0.20–1.30
Mangani Sulphas,	gr. iij.-xx.	0.20–1.30
Potassii Perman'ganas,	gr. ss.-ij.	0.03–0.13

Φ Liquor Potassii Permangana'tis.§ External use.

Man'na.—MANNA. The concrete, saccharine exudation of Fraxinus Ornus. A tree (nat. ord. Oleaceæ). Sicily, Calabria, and Apulia.

Manna,	℥ ss.-ij.	15.-60.

Is an ingredient of Infus. Sennæ Comp.

Marru'bium.—HOREHOUND. The leaves and tops of Marrubium vulgare. An herb (nat. ord. Labiatæ). Europe; naturalized in the U. S.

Marrubium, powdered,	ʒ ss.-i.	1.95–3.90

Mas'tiche.—MASTIC. A concrete resinous exudation from Pistacia Lentiscus. A shrub, or small tree (nat. ord. Anacardieæ). Countries bordering the Mediterranean,

Pil. Aloës et Mastiches. See Aloe.

Mat'ico.—MATICO. The leaves of Piper angustifolium. A shrub (nat. ord. Piperaceæ). Peru.

Matico, powdered,	ʒ ss.-ij.	1.95–7.80
Extractum Matico Fluidum,	ʒ ss.-i.	1.90–3.75

* Light and heavy magnesia (both MgO) are obtained by calcining, respectively, the light and heavy carbonate. Dose, about ⅓ less than that of the carbonate.

† Is deliquescent; on solution, effervesces.

‡ Contains 200 grains of magn. carb. in the ʒ xij. bottle.

§ "Condy's fluid" = gr. lxiv. in O i.

		Gm. Cc.
Tinctura Matico (1 in 10),	ʒ i.–ij.	3.75–7.50

Matrica'ria.—GERMAN CHAMOMILE. The flower-heads of Matricaria Chamomilla. A plant (nat. ord. Compositæ). Europe.

Matricaria. Same dose and same uses as Anthemis.

Mel.—HONEY. A saccharine secretion deposited in the honey-comb by Apis mellifica (the hive bee).

Mel Despuma'tum (clarified honey), } As vehicles.
Mel Rosæ. }

Melis'sa.—BALM. The leaves and tops of Melissa officinalis. A plant (nat. ord. Labiatæ). Southern Europe; naturalized in the U. S.

Menisper'mum.—CANADIAN MOONSEED. The rhizome and rootlets of Menispermum canadense. A woody, climbing plant (nat. ord. Menispermaceæ). Indigenous.

Extractum Menispermi Fluidum,	♏ v.–ʒ ss.	0.31–1.85

Men'tha Piperi'ta.—PEPPERMINT. The leaves and tops of Mentha piperita. A plant (nat. ord. Labiatæ). Great Britain. Naturalized on the continent of Europe and in the U. S.

Oleum, Men'thæ Piperi'tæ,	♏ ij.–vi.	0.12–0.36
Menthol * (peppermint camphor).	External use.	
Aqua Menthæ Piperitæ (oil, 1 in 500).	As a vehicle.	
Spiritus Menthæ Piperitæ,†	♏ x.–ʒ ss.	0.60–1.90
Trochis'ci Menthæ Piperitæ,	1 = oil ♏ $\frac{8}{10}$.	

Men'tha Vir'idis.—SPEARMINT. The leaves and tops of Mentha viridis (nat. ord. Labiatæ). Habitat, that of Peppermint.

Oleum Men'thæ Viridis,	♏ ij.–vi.	0.12–0.36
Aqua Menthæ Viridis (oil, 1 in 500).	As a vehicle.	
Spiritus Menthæ Viridis,‡	♏ x.–ʒ ss.	0.60–1.90

* Small capillary crystals deposited from the oil at 8° below zero.
† (Essence of peppermint.) Oil, 1 in 10.
‡ (Essence of spearmint.) Oil, 1 in 10.

		Gm. Cc.

Me'thyl Salic'ylas.—METHYL SALICYLATE. Artificial (synthetic) oil of Wintergreen. Identical with Oleum Betulæ Volatile.

Methyl Salicylas,	♏ i.–v.	0.06–0.31

Meze'reum.—MEZEREUM.* The bark of Daphne Mezereum and of other species of D. A shrub (nat. ord, Thymelæaceæ). Northern Europe, especially Great Britain.

Extractum Mezerei Fluidum,	♏ v.–xv.	0.31–0.92

Mos'chus.—MUSK. The dried secretion from the preputial follicles of Moschus moschiferus [the musk deer]. Central Asia.

Moschus,	gr. v.–xv.	0.33–1.
Tinctura Mos'chi (1 in 20),	ʒ ss.–ij.	1.90–7.50

Myris'tica.—NUTMEG. The kernel of the seed of Myristica fragrans, deprived of its testa. A tree (nat. ord. Myristicaceæ). Molucca Islands. Cultivated in East and West Indies.

Myristica, powdered,	gr. v.–xx.	0.33–1.30
Oleum Myris'ticæ,	♏ ij.–v.	0.12–0.30
Spiritus Myristicæ,†	ʒ i.	3.75

Myr'rha.—MYRRH. A gum resin obtained from Commiphora Myrrha. A small tree (nat. ord. Burseraceæ). Arabia Felix.

Myrrha, powdered,	gr. x.–ʒ ss.	0.65–1.95
Tinctura Myr'rhæ (1 in 5),	♏ xv.–ʒ ss.	0.90–1.90

See Aloës. See Iron (Griffith's pill and mixture).

Naphthali'num.—NAPHTALIN ($C_{10}H_8$). A hydrocarbon obtained from coal-tar. Colorless, strong odor and taste.

Naphthalinum,	gr. ii.–x.	0.12–0.65

Naph'tol.—BETA NAPHTOL ($C_{10}H_7OH$). A phenol occurring in coal-tar, but usually made artificially from Naphtalin.

* Is an ingredient of the comp. fl. ext. and comp. decoct. of sarsaparilla.

† (Essence of nutmeg.) Oil, 5 in 100.

		Gm. Cc.
Colorless shining crystals, faint phenol-like odor and burning taste.		
Naphtol,	gr. ii.–xv.	0.12–1.

Nux Vom'ica.—NUX VOMICA. [Poison Nut. Quaker Buttons.] The seed of Strychnos Nux Vomica. A tree nat. ord. Loganiaceæ). East Indies.

Extractum Nucis Vomicæ,*	gr. ss.–i.	0.03–0.06
Extractum Nucis Vomicæ Fluidum,†	♏ iij.–v.	0.18–0.30
Tinctura Nucis Vomicæ,‡	♏ xv.–xxv.	0.90–1.50
Strychni'na,§ / Strychninæ Sulphas,	gr. $\frac{1}{10}$.	0.003

O'leum Æthe'reum.—ETHEREAL OIL. A volatile liquid composed of equal volumes of Heavy Oil of Wine and Ether.

Used in Spiritus Ætheris Compositus.

O'leum Bergamot'tæ.—OIL OF BERGAMOT. A volatile oil expressed from the rind of the fresh fruit of Citrus Bergamia. A tree (nat. ord. Rutaceæ). Southern Europe.

O'leum Bet'ulæ Vola'tile.—VOLATILE OIL OF BETULA (oil of Sweet Birch). A volatile oil distilled from the bark of Betula lenta (nat. ord. Betulaceæ). Identical with Methyl Salicylas and nearly identical with oil of Gaultheria.

Oleum Betula Volatile,	♏ i.–v.	0.06–0.31

O'leum Cadi'num.—OIL OF CADE (Oleum-Juniperi Empyreumaticum). A product of the dry distillation of the wood of Juniperus Oxycedrus (nat. ord. Coniferæ). Europe and Siberia.

Oleum Cadi'num.

* 15% total alkaloids U. S. P., 1890. Dose, gr. ¼-½ (Wood).

† 1. = 1.5% total alkaloids U. S. P., 1890. Dose, ♏ ii.-iii. (Wood.)

‡ 1 part of extract in 50; 0.3% alkaloids.

§ Strychnine, an alkaloid prepared chiefly from nux v., or ignatia. "The bean of St. Ignatius yields strychnine more easily and more largely than nux vomica."

		Gm. Cc.

O'leum Cajupu'ti.—OIL OF CAJUPUT. A volatile oil distilled from the leaves of Melaleuca Leucadendron. A small tree (nat. ord. Myrtaceæ). Molucca Islands.

Oleum Cajuputi,	♏ v.–xx.	0.30–1.25

Oleum Erigeron'tis.—OIL OF ERIGERON. [Oil of Fleabane.] A volatile oil distilled from the fresh, flowering herb of Erigeron canadense (nat. ord. Compositæ.) Indigenous.

Oleum Erigerontis,	♏ x.– ʒ ss.	0.60–1.80

Oleum Gaulthe'riæ.—OIL OF WINTERGREEN. A volatile oil distilled from Gaultheria procumbens—a small indigenous evergreen plant (nat. ord. Ericaceæ). It consists mainly of Methyl Salicylate and is nearly identical with volatile oil of Betula.

Oleum Gaultheriæ,	♏ v.–xx.	0.30–1.25
Spiritus Gaultheriæ,*	♏ x.–xx.	0.60–1.25

Oleum Junip'eri.—OIL OF JUNIPER. A volatile oil distilled from the fruit of Juniperus communis—an evergreen shrub (nat. ord. Coniferæ). Europe. Naturalized in some parts of the U. S.

Oleum Junip'eri,	♏ v.–xv.	0.30–0.90
Spiritus Junip'eri (5 in 100),	ʒ ss.–i.	1.90–3.75
Spiritus Juniperi Compositus,†	ʒ ii.– ℥ ss.	7.50–15.

Oleum Lavan'dulæ Florum.—OIL OF LAVENDER FLOWERS. A volatile oil distilled from the fresh flowers of Lavandula officinalis. A small shrub (nat. ord. Labiatæ). Southern Europe.

Oleum Lavan'dulæ Florum,	♏ i.–v.	0.06–0.30
Spiritus Lavandulæ (5 in 100),	ʒ ss.–i.	1.90–3.75
Tinctura Lavandulæ Composita,‡	ʒ ss.–i.	1 90–3.75

Oleum Mor'rhuæ.—COD-LIVER OIL. [Ol. Jecoris Aselli.]

* (5 in 100.) Used chiefly for flavoring.

† Oil of juniper 8, oil of caraway and fennel ãã i., alcohol 1400, water ad 2000 parts. Corresponds very closely with Holland gin.

‡ Contains oil of lavender, oil of rosemary with cinnamon, cloves, nutmeg, and red saunders.

Gm.
Cc.

A fixed oil obtained from the fresh livers of Gadus Morrhua (Common Codfish), or of other species of G. Northern Atlantic.

Oleum Morrhuæ, ℥ ss. 15.

Oleum Myr'ciæ.—OIL OF BAY. A volatile oil distilled from the leaves of Myrcia acris (Bayberry tree, nat. ord. Myrtaceæ). West Indies.

Oleum Myrciæ. Used in making the Spirit.

Spiritus Myrciæ (Bay-rum).* External use.

Oleum Oli'væ.—OLIVE OIL. [Sweet Oil.] A fixed oil expressed from the ripe fruit of Olea europæa. A tree (nat. ord. Oleaceæ.) Countries bordering the Mediterranean.

Oleum Olivæ, ℥ i.–ij. 30.–60.

Oleum Rici'ni.—CASTOR OIL. A fixed oil expressed from the seed of Ricinus communis. A tree (nat. ord. Euphorbiaceæ). East Indies and northern Africa; naturalized in the W. Indies; cultivated in the U. S. and elsewhere. In temperate latitudes is an annual plant.

Oleum Ricini,† ℥ ss. 15.

Oleum Rosmari'ni.—OIL OF ROSEMARY. A volatile oil distilled from the leaves of Rosmarinus officinalis. An evergreen shrub (nat. ord. Labiatæ).

Oleum Rosmarini, ♏ iii.–vi. 0.18–0.36

Oleum San'tali.—OIL OF SANTAL. [Oil of Sandal Wood.] A volatile oil distilled from the wood of Santalum album (white saunders.) A tree (nat. ord. Santalaceæ). E. Indies, South Pacific Islands, and S. America.

Oleum Santali, ♏ xx.– ʒ ss. 1.25–1.90

Oleum Ses'ami.—OIL OF SESAMUM. [Benné Oil.] A fixed oil expressed from the seed of Sesamum indicum.

* Contains oil of myrcia, orange-peel, and pimenta.

† "Differs from other fixed oils in being soluble in all proportions in cold abs. alcohol."

Gm.
Cc.

A plant (nat. ord. Pedaliaceæ). East Indies; cultivated in the Southern U. S. and elsewhere.

Oleum Sesami.*

Oleum Theobro'matis.—OIL OF THEOBROMA. [Butter of Cacao.] A fixed oil expressed from the seed of Theobroma Cacao. A tree (nat. ord. Sterculiaceæ). Mexico, W. I., and South America.

Used in Suppositories.

Oleum Thy'mi.—OIL OF THYME. A volatile oil distilled from Thymus vulgaris. A plant (nat. ord. Labiatæ). The south of France; cultivated elsewhere in Europe, and in the U. S.

Oleum Thymi,	♏ ij.–x.	0.12–0.60
Thymol.†	External use.	

Oleum Tig'lii.—CROTON OIL. A fixed oil expressed from the seed of Croton Tiglium. A small tree or shrub (nat. ord. Euphorbiaceæ). East Indies.

Oleum Tiglii,	♏ ss.–ij.	0.03–0.12

O'pium.—OPIUM.‡ The concrete, milky exudation obtained in Asia Minor by incising the unripe capsules of Papaver

* "Bears some resemblance to ol. olivæ in its properties, and may be used for similar purposes."

† Obtained from oil of thyme and of some other plants. Occurs either in crystals or as a liquid.

‡ The dose of opium and the strength of its various preparations being given, the doses of the latter will be evident.

Special law, passed June 21, 1887, to regulate the sale of Opium and Morphine in the State of New York. Chapter 636.

"SECTION 1.—From and after the passage of this act no pharmacist, druggist, apothecary, or other person shall refill more than once prescriptions containing opium or morphine, or preparations of either, in which the dose of opium shall exceed one fourth grain, or morphine one twentieth grain, except with the verbal or written order of a physician.

"SECTION 2.—Any person violating the provisions of Section 1 of this act shall be deemed guilty of a misdemeanor, and shall upon conviction thereof be fined not less than $10, nor more than $25, in the discretion of the court, for each and every such offense."

Gm.
Cc.

somniferum (the poppy, nat. ord. Papaveraceæ). Is produced chiefly in Asia Minor, Turkey, Persia, and India; also, to a slight extent, in Europe and the United States. Opium, in its normal moist condition, should yield not less than 9 % of morphine.

O'pii Pulvis (Powdered Opium),*	dose, gr. ss.–ij.	0.03–0.13
Opium Deodora'tum,†		
Pilulæ Opii,	1 = gr. i.	0.06
Extractum Opii, 18 % morphine, twice the strength of opium.		
Emplastrum Opii.‡		
Trochis'ci Glycyrrhi'zæ et Opii,	1 = opium gr. $\frac{1}{18}$.	0.005
Pulvis Ipecacuan'hæ et Opii,§	gr. x. = Op. gr. i.	
Tinctura Ipecacuanhæ et Opii,	♏ x. = Op. gr. i.	
Acetum Opii (Black Drop),‖	Opium, 1 part in 10.††	
Vinum Opii (Sydenham's Laudanum),¶		
Tinctura Opii (Laudanum. Tinctura Thebaïca),		
Tinctura Opii Deodora'ti,**		
Tinctura Opii Camphora'ta,‡‡	Op. nearly gr. ij. in ℥ i.	

* Powdered O., for pharm. or medicinal uses, should contain from 13 to 15 % of morphine. In 1880 the direction was, from 12 to 16 % of morphine.

† (Contains 14 % morphine.) Is O. deprived, by the action of ether, of its narcotine and odorous principles.

‡ Ext. opii 6, Burgundy pitch 18, lead plaster 76 parts.

§ See ipecac.

‖ Contains nutmeg, 3 in 100.

¶ Contains cinnamon and cloves, āā 1 in 100.

** Deprived, by the action of ether, of its narcotine and odorous principles.

†† These four preparations are now of one strength, 10 parts opium in 100. (By measure, acetum, ♏ 9.6; vinum, ♏ 10.5; tinctura and tinct. deodor., ♏ 11 = gr. i.) In the U. S. P., 1870, their strengths were: Acetum 16.3 in 100; vinum 13 in 100; tinctura and tinct. deodor. 9 in 100.

‡‡ (Paregoric.) Opium, benzoic acid, camphor, oil of anise āā 1, glycerin 10, alcohol dil. ad 250 parts.

Gm.
Cc.

OFFICIAL ALKALOIDS OF OPIUM.*

Morphi'na (Pharm. use),	gr. ¼ about equals opium gr. i.	
Morphi'næ Ace'tas,		
Morphinæ Hydrochlo'ras,		
Morphinæ Sulphas,		
Φ Liquor Morphinæ Sulphatis,† Morph. Sulph., gr. i. in ℥ i.		
Φ Magendie's Solution, Morph. Sulph., gr. xvi. in ℥ i.		
Φ Suppositoria Morphinæ (Sulph.), Pharm., 1870, 1 = gr. ss.		
Pulvis Morphinæ Compositus,‡ gr. x. = Morph. Sulph. gr. $\frac{1}{6}$		
Trochis'ci Morphinæ et Ipecacuan'hæ,§ 1 = gr. $\frac{1}{40}$		0.0018
Apomorphi'næ Hydrochloras,‖	gr. $\frac{1}{15}$–$\frac{1}{10}$	0.004–0.006
Codei'na, commencing dose,	gr. i.	0.06

Pancreati'num.—PANCREATIN. A mixture of the enzymes naturally existing in the pancreas of warm-blooded animals. Usually obtained from the fresh pancreas of the hog.

Pancreati'num,	gr. v.–xv.	0.32–1.

Paraldehy'dum.—PARALDEHYDE. A polymeric form of Ethylic Aldehyde. A colorless, transparent liquid, strong odor, burning taste.

Paraldehydum,	ʒ ss.–ii.	1.90–7.50

Parei'ra.—PAREIRA BRAVA. The root of Chondodendron tomentosum. A climbing, woody vine (nat. ord. Menispermaceæ). Brazil and Peru.

Extractum Parei'ræ Fluidum,	ʒ ss.–ij.	1.90–7.50

* Unofficial alkaloids are: narcotine, thebaine, papaverine, narceine, hydrocotarnine, pseudomorphine, protopine, laudanine, codamine, rhœadine, meconidine, cryptopine, laudanosine, lanthopine, gnoscopine.

† "U. S. solution." Pharm., 1870.

‡ (Tully's powder—a substitute for Dover's.) Morph. sulph. 1: camphor, licorice, calcii carb. præcip., āā 20 parts.

§ 1 = morph. sulph. gr. $\frac{1}{40}$, ipecac. gr. $\frac{1}{12}$.

‖ "The hydrochlorate of an artificial alkaloid prepared from morphine." May also be made from codeine. The dose given in the text is for hypodermic use.

		Gm. *Cc.*

Pe'po.—PUMPKIN SEED. The seed of Cucurbita Pepo (common pumpkin) (nat. ord. Cucurbitaceæ).

Pepo,	℥ i.–ij.	15.–30.

Pepsi'num.—PEPSIN. A proteolytic ferment obtained from the mucous membrane of the fresh stomach of the hog, and capable of digesting not less than 3,000 times its own weight of coagulated albumen.*

Pepsi'num,	gr. i.–v.	0.06–0.32
Pepsinum Saccharatum,†	gr. v.–ʒ ss.	0.32–1.95

Petrola'tum.‡—Petroleum in its crude state is unofficial. A mixture of hydrocarbons, chiefly of the marsh-gas series. The official preparations are obtained by distilling off the lighter and more volatile portions, and purifying the residue when it has the desired consistence.

Petrolatum Liquidum,
Petrolatum Molle (melts 104°–113° F.),
Petrolatum Spissum (melts 113°–125° F.). } External use.

Φ Petroseli'num.—PARSLEY. The root of Petroselinum sativum. A plant. The south of Europe; cultivated in the U. S. and elsewhere.

Φ Apiol (in capsules, each *Gm.* 0.25),	1–3 capsules.

Phos'phorus.—PHOSPHORUS. A solid, non-metallic element; translucent, colorless when pure; resembles wax. Inflames at 100° F. Is obtained from bones.

Phosphorus,§	gr. $\frac{1}{100}$–$\frac{1}{75}$.	0.0006–0.0008
Oleum Phosphora'tum,‖	♏ iij.–v.	0.18–0.30
Pilulæ Phos'phori,¶	1 gr. = $\frac{1}{100}$.	0.0006

* When tested by the process of the Pharmacopœia of 1890.

† Pepsin 1, sugar of milk 9. Capable of digesting 300 times its weight of albumen.

‡ When petrolatum is ordered without further specification, petrolatum molle (soft petroleum) is dispensed.

§ Should never be given in substance.

‖ Phosphorus 1, ether 9, expressed oil of almond, ad 100 parts. ♏ i. = P. gr. $\frac{1}{75}$. Dose, ♏ i.–iij. (Wood).

¶ Contain also althæa, acacia, and glycerin, and are coated with balsam of tolu.

		Gm. Cc.
Spiritus Phosphori,*	ʒ i. = about gr. $\frac{1}{15}$.	0.004
Elixir Phosphori,†	ʒ i. = about gr. $\frac{1}{70}$.	0.0008
Φ Thompson's Solution of P.,‡	ʒ i. = gr. $\frac{1}{20}$.	0.003
Zinci Phos'phidum,§	gr. $\frac{1}{60}$.	0.0012
Calcii, Ferri, Potassii, Sodii } Hypophos'phis,	gr. x.–ʒ ss.	0.65–1.95
Syrupus Hypophosphi'tum,‖	ʒ i.–ij.	3.75–7.50
Syrupus Hypophosphitum cum Ferro,¶	ʒ i.–ij.	3.75–7.50

Physostig'ma.—CALABAR BEAN. The seed of Physostigma venenosum. A woody, climbing plant (nat. ord. Leguminosæ). Calabar, Africa.

Extractum Physostig'matis,	gr. $\frac{1}{16}$–$\frac{1}{6}$.	0.004–0.01
Tinctura Physostigmatis (1 in 6.67),	♏ x.–xxv.	0.62–1.60
Physostigmi'næ Salicy'las,**	gr. $\frac{1}{80}$.	0.0008
Physostigminæ Sulphas,††	gr. $\frac{1}{100}$–$\frac{1}{60}$.	0.0006–0.001

Phytolac'cæ Fructus.—PHYTOLACCA BERRY. [Poke Berry.] The fruit of Phytolacca decandra. An indigenous plant (nat. ord. Phytolaccaceæ).

Phytolaccæ Radix.—PHYTOLACCA ROOT. [Poke Root.] The root of Phytolacca decandra.

* Contains P. 1.2 parts in 1000, or about gr. $\frac{1}{18}$ in ʒ i.

† Contains spirit of P. 21, oil of anise .2, glycerin 55, and aromatic elixir ad 100.

‡ P. is dissolved in warmed abs. alcohol; and glycerin, alcohol, and spts. menth. pip. added.

§ "Theoretically, gr. i. contains nearly gr. ¼ of phosphorus. Maximum commencing dose gr. $\frac{1}{20}$."—U. S. Disp. "Dose, gr. $\frac{1}{20}$–$\frac{1}{12}$. Prof. Seguin recommends gr. $\frac{1}{6}$-$\frac{1}{4}$."—Wood.

‖ ʒ i. contains calcii hypophosphis about gr. iij., sod. and potass. hypophosphis, āā about gr. i.; with citric ac., spts. of lemon, and sugar.

¶ (Lactate of iron 1, syrup of hypophosphites 98 parts.) ʒ i. = nearly gr. ¾ of ferri lactas.

** Eserine salicylate. "Tentative dose should not exceed gr. $\frac{1}{80}$."

†† Eserine sulphas.

		Gm. Cc.
Extractum Phytolac'cæ Radicis Fluidum,	♏ v.–ʒ ss.	0.31–1.85

Picrotoxi'num.—PICROTOXIN. A neutral principle prepared from the seeds of Anamirta paniculata (Cocculus Indicus). A climbing shrub (nat. ord. Menispermaceæ). East Indies.

Picrotoxinum.*	External use chiefly.	

Pilocar'pus.—JABORANDI. The leaflets of Pilocarpus Selloanus and of Pilocarpus Jaborandi. A plant (nat. ord. Rutaceæ). Brazil.

Pilocarpus, powdered,	gr. xx.–ʒ i.	1.30–3.90
Extractum Pilocar'pi Fluidum,	♏ xv.–ʒ ss.†	0.90–1.90
Pilocarpi'næ Hydrochlo'ras,‡	⅛–⅓	0.008–0.02

Pimen'ta.—ALLSPICE. [Jamaica Pepper.] The nearly ripe fruit of Pimenta officinalis. A tree (nat. ord. Myrtaceæ). W. Indies, Mexico, and S. America.

Pimenta, powdered,	gr. x.–xl.	0.65–2.60
Oleum Pimen'tæ,	♏ iij.–vi.	0.18–0.36

Pi'per.—BLACK PEPPER.§ The unripe fruit of Piper nigrum. A perennial vine (nat. ord. Piperaceæ). Cochin-China and India.

Piper, powdered,	gr. v.–xx.	0.33–1.30
Oleoresi'na Piperis,	♏ ¼–i.	0.015–0.06
Piperi'num,	gr. i.–viij.	0.06–0.50

Pix Burgundica.—BURGUNDY PITCH. The prepared resinous exudation of Abies excelsa (Norway Spruce). A tree (nat. ord. Coniferæ). Europe and Northern Asia.

Emplastrum Pi'cis Burgun'dicæ.‖	
Emplastrum Picis Cantharidatum	See Cantharis.

* Dose, gr. $\frac{1}{30}$–$\frac{1}{15}$.—Bartholow.
† Dose, ʒ ss.-i.—Wood.
‡ Dose for hypodermic use.
§ White pepper is the ripe berry deprived of its skin.
‖ Burgundy pitch 9, yellow wax 1 part.

		Gm. Cc.

Pix Liq'uida.—TAR. An empyreumatic oleoresin obtained by the destructive distillation of the wood of Pinus palustris and of other species of Pinus. An indigenous tree (nat. ord. Coniferæ).

Oleum Picis Liq'uidæ.*	External use, chiefly.	
Syrupus Picis Liquidæ,†	ʒ i.–ij.	3.75–7.50
Unguentum Picis Liquidæ.‡		

Plum'bum.—LEAD. The metal Lead is not official.

Plum'bi Ace'tas (Sugar of Lead),§	gr. i.–iij.	0.06–0.20
Liquor Plumbi Subaceta'tis (Goulard's extract).‖		
Liq. Plumbi Subacetatis Dilu'tus (Lead water).¶		
Ceratum Plumbi Subacetatis (Goulard's cerate).**		
Plumbi Carbo'nas (White Lead).		
Unguentum Plumbi Carbona'tis,	1 in 10.	
Plumbi Iod'idum,	gr. ss.–iv.	0.03–0.26
Unguentum Plumbi Iod'idi,	1 in 10.	
Plumbi Nitras.††	External use.	
Plumbi Ox'idum (Litharge).		
Emplastrum Plumbi (Diachylon plaster).‡‡		
Unguentum Diach'ylon.§§		

Podophyl'lum.—MAY APPLE. [Mandrake.] The rhizome and rootlets of Podophyllum peltatum. An indigenous plant (nat. ord. Berberideæ).

Podophyllum, powdered,	gr. xx.	1.30
Extractum Podophylli,	gr. i.–iij.	0.06–0.20

* A vol. oil prepared by distilling tar; pyroligneous ac. and pitch being left behind.

† Tar 6, sugar 60, water ad 100 parts.

‡ Tar and suet equal parts.

§ Is practically the only preparation of lead used internally.

‖ External use, diluted. Contains about 25 % of subacetate of lead.

¶ Liq. pb. subacet., 3 in 100 parts.

** Liq. pb. subacet. 1, ceratum camphoræ, 4 parts.

†† Ledoyen's disinfecting fluid is a solution of plumbi nitras, ʒ i.–℥ i.

‡‡ (About ⅓ litharge and ⅔ olive oil.) Lead plaster is the basis of most of the other plasters.

§§ Lead plaster 50, olive oil 49, oil of lavender 1 part.

		Gm. Cc.
Extractum Podophylli Fluidum,	♏ v.–xv.	0.30–0.90
Resina Podophylli,*	gr. ⅛–½	0.008–0.03
Pilulæ Catharticæ Vegetabiles.	See Colocynth.	

Potas'sium.—POTASSIUM.† The metal Potassium is not official.

Potas'sa.‡ A caustic solid.

Liquor Potas'sæ,§ well diluted,	♏ v.–xx.	0.30–1.25
Potassa cum Calce (Vienna Paste).‖ Caustic.		
Potassa Sulphura'ta,¶	gr. ij.–x.	0.13–0.65
Potas'sii Carbo'nas,**	gr. x.–ʒ ss.	0.65–1.95
Potassii Bicarbo'nas (Saleratus),	gr. xx.–ʒ i.	1.30–3.90
Potassii Ace'tas,	gr. xx.–ʒ i.	1.30–3.90
Potassii Bichro'mas,††	caustic.	
Potassii Chloras,	gr. x.–xx.	0.65–1.30
Trochis'ci Potassii Chlora'tis,	1 = gr. v.	0.33
Potassii Ci'tras,	gr. xx.–xxv.	1.30–1.65
Liquor Potassi Citra'tis,‡‡	℥ ss.	15.
Potassii Citras Effervescens,§§	ʒ ss.–iss.	1.90–5.80
Potassii Nitras,‖‖	gr. v.–xx.	0.33–1.30
Charta Potassii Nitratis.¶¶		

* The name podophyllin is inappropriate, and should be abandoned.

† Potassa, potassa c. calce, K. acetas, carbonas, citras, and hypophosphis are deliquescent; K. cyanidum, iodidum, sulphis, and tartras slightly so.

‡ (Caustic potash. Potassium hydrate. Potassium hydroxide.)

§ Contains about 5% of potassa.

‖ A grayish-white powder; equal parts potassa and lime.

¶ (Liver of sulphur.)

** The impure carbonate is called pearlash.

†† "Mueller's fluid," for preserving anatomical specimens, is 2 to 2½ parts potass. bichromate, 1 sodium sulphate, and 100 water.

‡‡ Potass. bicarb. 8, citric acid 6, water ad 100 parts. Contains about 9% of potass. citrate.

§§ Citric acid 31, potass. bicarb. 45, and sugar 24 parts in 100.

‖‖ (Nitre, salpetre). Sal prunelle is nitre fused and run into circular moulds.

¶¶ "Asthma paper." (Strips of white, unsized paper, dipped in a solution of nitre in water—1 part in 4—and dried.) To be burned, and the fumes inhaled.

		Gm. Cc.
Potassii Sulphas,	ʒ ss.–℥ ss.	1.95–15.
Potassii Bitar'tras (Cream of Tartar),*	ʒ i.–℥ i.	3.90–31.
Potassii et Sodii Tartras.†	ʒ i.–℥ i.	3.90–31.
Potassii Bromidum.	See Bromine.	
Potassii Cyanidum. / Potassii Ferrocyanidum.	See Hydrocyanic Ac.	
Potassii Hypophosphis.	See Phosphorus.	
Potassii Iodidum.	See Iodine.	
Potassii Permanganas.	See Manganese.	

Pru'num.—PRUNE. The fruit of Prunus domestica (cultivated plum tree), (nat. ord. Rosaceæ).

An ingredient of Confectio Sennæ.

Prunus Virginia'na.—WILD CHERRY. The bark of Prunus serotina, collected in autumn. An indigenous tree (nat. ord. Rosaceæ).

Prunus Virginiana, powdered,	ʒ ss.–i.	1.95–3.90
Extractum Pruni Virginianæ Fluidum,	ʒ ss.–i.	1.90–3.75
Infusum Pruni Virginianæ (1 in 25),	℥ ij.	60.
Syrupus Pruni Virginianæ (1 in 6.6),	℥ ss.	15.

Pulsatil'la.—PULSATILLA. The herb of Anenome Pulsatilla. A. pratensis, collected soon after flowering. Plants (nat. ord. Ranunculaceæ). Temperate regions, especially of Europe.

Pulsatilla, powdered,	gr. ij.–iij.	0.13–0.20
Φ Tinctura Pulsatillæ,	ʒ ss.	1.90

Pyre'thrum.—PELLITORY. The root of Anacyclus Pyrethrum. A plant (nat. ord. Compositæ). The Levant, Barbary, and the Mediterranean coast of Europe.

Tinctura Pyre'thri (1 in 5). External use.

Pyrogal'lol.—PYROGALLIC ACID ($C_6H_3(OH)_3$). A triatomic phenol obtained chiefly by the dry distillation of gallic acid. White, shining needles, odorless, bitter taste.

* "Imperial drink." Potass. bitart. ℥ ss., dissolved in boiling water O iij.; add white sugar ℥ iv., and fresh lemon peel ℥ ss.

† (Rochelle Salt.) For Seidlitz powder, see Sodium.

Gm.
Cc.

Pyroxyli'num.—PYROXYLIN. [Soluble Gun-Cotton.] See Gossypium.

Quas'sia.—QUASSIA. The wood of Picræna excelsa (Quassia excelsa). [Bitter Ash.] A tree (nat. ord. Simarubeæ). Jamaica and the Caribbean islands.

Extractum Quas'siæ,	gr. i.–ij.	0.06–0.13
Extractum Quassiæ Fluidum,	♏ v.–x.	0.30–0.60
Tinctura Quassiæ (1 in 10),	ʒ i.	3.75

Quer'cus Al'ba.—WHITE OAK.* The bark of Quercus alba. An indigenous tree (nat. ord. Cupuliferæ).

℗ Decoctum Quercus Al'bæ. External use.

Quilla'ja.—SOAP BARK. The bark of Quillaja Saponaria. A tree (nat. ord. Rosaceæ). Chili.

Tinctura Quillajæ (1 in 5),	♏ xv.–ʒ ss.	0.92–1.85

Resi'na.—RESIN. [Rosin. Colophony.] The residue left after distilling off the volatile oil from Turpentine.

Ceratum Resi'næ,† basilicon ointment.

Emplastrum Resinæ,‡ adhesive plaster.

Resorci'num.—RESORCIN ($C_6H_4(OH)_2$). A diatomic phenol. Colorless crystals, having a peculiar odor and a disagreeable taste.

Resorci'num,	gr. ii.–x.	0.12–0.65

Rham'nus Purshia'na.—CASCARA SAGRADA. The bark of Rhamnus Purshiana. A tree (nat. ord. Rhamnaceæ). California.

Rhamnus Purshiana,	gr. xv.–ʒ i.	0.95–3.75
Extractum Rhamni Purshianæ Fluidum,	♏ xv.–ʒ i.	0.92–3.70

Rhe'um.—RHUBARB. The root of Rheum Officinale. Plants (nat. ord. Polygonaceæ). China, Chinese Tartary, and Thibet.

* *Quercitron* is the powdered bark of the black oak, Quercus tinctoria.

† Resin 7, yellow wax 3, lard 10 parts.

‡ Resin about 3, yellow wax about 1, lead plaster 16 parts.

		Gm. Cc.
Rheum, powdered,	gr. v.–ʒ ss.	0.33–1.95
Pilulæ Rhe'i,*	1 = gr. iij.	0.18
Pilulæ Rhei Compos'itæ,†	1–4 pills.	
Pulvis Rhei Compositus,‡	ʒ ss.–i.	1.95–3.90
Extractum Rhei,	gr. v.–x.	0.33–0.65
Extractum Rhei Fluidum,	♏ v.–ʒ ss.	0.30–1.90
Tinctura Rhei,§	ʒ i.–ij.	3.75–7.50
Tinctura Rhei Aromat'ica,‖	ʒ ss.–i.	1.90–3.75
Tinctura Rhei Dulcis,¶	ʒ ij.–iij.	7.50–11.25
Syrupus Rhei,**	ʒ ij.–℥ ss.	7.50–15.
Syrupus Rhei Aromaticus,††	℥ ss.–ij.	15.–60.
Mistura Rhei et Sodæ,‡‡	℥ ss.–ij.	15.–60.

Rhus Gla'bra.—SUMACH. The fruit of Rhus Glabra. An indigenous shrub (nat. ord. Anacardieæ).

Extractum Rho'is Gla'bræ Fluidum. External use.

Rhus Toxicoden'dron.—POISON-OAK. The fresh leaves of Rhus radicans, poison-ivy, a vine (nat. ord. Anacardieæ). Indigenous.

Rhus Toxicodendron,	gr. i.–iv.	0.06–0.26

Rosa Centifo'lia.—PALE ROSE. The petals of Rosa Centifolia (nat. ord. Rosaceæ).

Oleum Rosæ.§§	For flavoring.	

* Rhubarb gr. iij., soap gr. 1 in each.

† Rhubarb gr. ij., purified aloes gr. iss., myrrh gr. i., oil of peppermint gr. $\frac{1}{10}$ in each.

‡ Rhubarb 5, magnesia 13, ginger 2 parts. (Gregory's powder.)

§ Rhubarb 10, cardamom 2 parts in 100.

‖ Rhubarb 20, cinnamon and cloves āā 4, nutmeg 2 parts in 100.

¶ Rhubarb 10, licorice and anise āā 4, cardamom 1 part in 100.

** Rhubarb 10, spirits of cinnamon. 4, carbonate of potass. 1, syrup, glycerin, and water ad 100 parts.

†† (Spiced syrup of rhubarb.) Aromatic tinct. of rhubarb 15, syrup 85 parts. "Contains one-seventh of diluted alcohol." ʒ i. = about gr. 1½ of rhubarb.

‡‡ Ext. rhei fl., sodii bicarb., spirit. menth. pip., āā 3; water ad 100 parts.

§§ (Attar, otto, or essence of rose.) A vol. oil distilled from Rosa damascena.

		Gm. Cc.
Aqua Rosæ.	In lotions.	
Aqua Rosæ Fortior.	In lotions.	
Unguentum Aquæ Rosæ (Cold cream).*		

Rosa Gal'lica.—RED ROSE. The petals of Rosa Gallica, collected before expanding (nat. ord. Rosaceæ).

Extractum Rosæ Fluidum,	ʒ i.–ij.	3.75–7.50
Confectio Rosæ,†	Used as vehicles.	
Mel Rosæ,		
Syrupus Rosæ.‡		

Ru'bus.—BLACKBERRY. The bark of the root of Rubus villosus (a bush) and R. trivialis and R. canadensis (a vine), (nat. ord. Rosaceæ). Indigenous.

Extractum Rubi Fluidum,	ʒ ss.–i.	1.90–3.75
Syrupus Rubi,§	ʒ i.–℥ ss.	3.75–15.

Rubus Idæ'us.—RASPBERRY. The fruit of Rubus idæus. An indigenous bush (nat. ord. Rosaceæ).

Syrupus Rubi Idæ'i.	As a vehicle.	

Ru'mex.—YELLOW DOCK. The root of Rumex crispus and other species of R. A plant (nat. ord. Polygonaceæ). Europe; naturalized in this country.

Extractum Ru'micis Fluidum,	ʒ i.	3.75

Sabi'na.—SAVINE. The tops of Juniperus Sabina. An evergreen shrub (nat. ord. Coniferæ). The south of Europe and the Levant.

Extractum Sabi'næ Fluidum,	♏ iij.–viij.	0.18–0.50
Oleum Sabinæ,	♏ ij.–v.	0.12–0.30

Sac'charum.—SUGAR. The refined sugar of Saccharum officinarum [sugar-cane]. A tall plant; also from various species of Sorghum (nat. ord. Gramineæ); also from

* Expressed oil of almond 5, stronger rose water 1.5. spermaceti and white wax, āā 1 part.

† Red rose, sugar, honey, and rose-water.

‡ Fl. ext. 1, syrup 7 parts.

§ Fl. ext. 1, syrup 4 parts.

Gm.
Cc.

one or more varieties of Beta vulgaris (nat. ord. Chenopodiaceæ). Cultivated in most tropical countries.

Syrupus (simple syrup).* As a vehicle.

Sac'charum Lac'tis.—SUGAR OF MILK [Lactose]. A peculiar, crystalline sugar obtained from the whey of cow's milk.

Used as a vehicle.

Salici'num.—SALICIN. A neutral principle obtained from several species of Salix and Populas. Willow trees (nat. ord. Salicaceæ).

Salicinum, gr. xx.–ʒ ss. 1.30–1.95

Sa'lol.—PHENYL SALICYLATE. The salicylate ether of phenol. A white crystalline powder, almost odorless and tasteless.

Salol, gr. iii.–xv. 0.19–1.

Sal'via.—SAGE. The leaves of Salvia officinalis. A perennial plant (nat. ord. Labiatæ). The south of Europe; cultivated in this country.

Is an ingredient of Vinum Aromaticum.

Sambu'cus.—ELDER. The flowers of Sambucus canadensis. An indigenous shrub (nat. ord. Caprifoliaceæ).

Sanguina'ria.—BLOODROOT. [Puccoon.] The rhizome of Sanguinaria canadensis; collected in autumn. An indigenous plant (nat ord. Papaveraceæ).

Extractum Sanguina'riæ Fluidum, ♏ iij.–v. 0.18–0.30

Tinctura Sanguinariæ (1 in 6.6), ♏ xv.–ʒ ss. 0.90–1.90

San'talum Ru'brum.—RED SAUNDERS. The wood of Pterocarpus santalinus. A tree (nat. ord. Leguminosæ). India.

Used as a coloring agent.

Santon'ica.—LEVANT WORMSEED. The unexpanded flower-head of Artemisia pauciflora. A perennial plant (nat. ord. Compositæ). Persia and Asia Minor.

Santonica, powdered, gr. x.–ʒ ss. 0.65–1.95

*Sugar 85, water ad 100 parts.

		Gm. Cc.
Santoni'num (a neutral principle),*	gr. ij.–iv.	0.13–0.26
Trochis'ci Santonini,	1 = gr. ss.	0.03

Sa'po.—SOAP (white castile soap). Soap prepared from soda and olive oil.

Emplastrum Sapo'nis. (Soap 1, lead plaster 9 parts.)

Linimentum Saponis.†

Sa'po Mollis.—SOFT SOAP.‡ Soap prepared from Potassa and Linseed oil.

Linimentum Sapo'nis Mollis.§ External use.

Sarsaparil'la.—SARSAPARILLA. The root of Smilax officinalis, S. medica, and of other undetermined species of S. Woody vines (nat. ord. Liliaceæ). Mexico and northern South America.

Extractum Sarsaparil'læ Fluidum, Extractum S. Fluidum Compositum,‖	ʒ ss.–i.	1.90–3.75
Syrupus Sarsaparillæ Compositus,¶	℥ ss. or more.	15.
Decoctum Sarsaparillæ Compositum,**	℥ iij.–vi.	90.–180.

Sas'safras.—SASSAFRAS. The bark of the root of Sassafras variifolium. An indigenous tree (nat. ord. Laurineæ).

Oleum Sassafras. For flavoring.

Sas'safras Medul'la.—SASSAFRAS PITH. The pith of Sassafras variifolium (nat. ord. Laurineæ).

Mucilago Sassafras Medul'læ.†† As collyrium and drink.

* Dose for a child two years old, gr. ¼-½, *Gm.* 0.016-0.03.

† (Camphorated tincture of soap. Liquid opodeldoc.) Soap 7, camphor 4.5, oil of rosemary 1, alcohol 75, water ad 100 parts.

‡ Should contain at least 5 % of free hydrate of potassium.

§ Soft soap 65, oil of lavender 2, alcohol ad 100 parts.

‖ Sarsaparilla 75, licorice 12, sassafras 10, mezereum 3 parts in 100.

¶ Fluid extract of S. (1 in 5) also liquorice, senna, sassafras, anise, oil of wintergreen, sugar, and water. Is the best vehicle for iodide of potassium (Wood).

** (1 in 10.) Same ingredients as the comp. fl. ext., plus guaiacum wood. Is an imitation of the "Lisbon diet-drink."

†† Sassafras pith 2, water 100 parts.

		Gm. Cc.

Scammo'nium.—SCAMMONY. A resinous exudation from the root of Convolvulus Scammonia. A vine (nat. ord. Convolvulaceæ). Syria, Anatolia, and the Archipelago.

Scammonium,	gr. v.–xv.	0.33–1.
Resina Scammo'nii,	gr. iv.–viij.	0.26–0.52

Scil'la.—SQUILL. [Sea Onion.] The sliced bulb of Urginea maritima. A plant (nat. ord. Liliaceæ). Coasts of the Mediterranean.

Scilla, powdered,	gr. i.–ij.	0.06–0.13
Extractum Scillæ Fluidum,	♏ i.–iij.	0.06–0.18
Acetum Scillæ (1 in 10),	♏ x.– ʒ ss.	0.60–1.80
Tinctura Scillæ (1 in 6.6),	♏ x.–xx.	0.60–1.20
Syrupus Scillæ,*	ʒ ss.–i.	1.80–3.75
Syrupus Scillæ Compos'itus,†	♏ xx.– ʒ ss.	1.20–1.90

Scopa'rius.—BROOM. The tops of Cytisus Scoparius. A European shrub (nat. ord. Leguminosæ); cultivated in this country.

Extractum Scopa'rii Fluidum,	♏ xv.– ʒ i.	0.92–3.70
Spartei'næ Sulphas,	gr. ⅛–i	0.008–0.06

Scutella'ria.—SCULLCAP. [Hoodwort. Madweed.] Scutellaria lateriaflora. An indigenous plant (nat. ord. Labiatæ).

Extractum Scutella'riæ Fluidum,	ʒ ss.–i.	1.90–3.75

Sen'ega.—SENEGA. [Senega Snakeroot.] The root of Polygala Senega. An indigenous plant (nat. ord. Polygaleæ).

Extractum Senegæ Fluidum,	♏ i.–v.	0.06–0.30
Syrupus Senegæ,‡	ʒ i.–ij.	3.75–7.50
Syrupus Scillæ Comp.	See Squill.	

Sen'na.—SENNA. The leaflets of Cassia acutifolia (of Nu-

* Vinegar of squill 1, sugar 2 parts. ♏ xxx = gr. i. of squill.

† (Hive-syrup.) Contains squill and senega, āā 8, tartar emetic about ⅛ part in 100. About gr. i. in ʒ i. of tartar emetic.

‡ Fluid extract, 1 part in 6¼.

		Gm. Cc.
bia and Upper Egypt) and of C. augustifolia (of Southern Arabia). Shrubs (nat. ord. Leguminosæ).		
Confectio Sennæ,*	ʒ i.–ij.	3.90–7.80
Extractum Sennæ Fluidum,	ʒ i.–℥ ss.	3.75–15.
Infusum Sennæ Compositum,†	℥ iv.	120.
Syrupus Sennæ,	ʒ i.–℥ ss.‡	3.75–15.
Pulvis Glycyrrhi'zæ Compositus,§	ʒ ss.–ij.	1.95–7.80

Serpenta'ria.—VIRGINIA SNAKEROOT. The rhizome and rootlets of Aristolochia Serpentaria and of A. reticulata. An indigenous plant (nat. ord. Aristolochiaceæ).

Extractum Serpenta'riæ Fluidum,	♏ xx.–ʒ ss.	1.25–1.90
Tinctura Serpentariæ (1 in 10),	ʒ i.–℥ ss.	3.75–15.

Se'vum.—SUET. The internal fat of the abdomen of Ovis Aries [the sheep], purified by melting and straining.

Sevum.	Pharm. use.	

Sina'pis Al'ba.—WHITE MUSTARD. The seed of Brassica alba. Plant (nat. ord. Cruciferæ). Europe: cultivated in this country.

Sina'pis Ni'gra.—BLACK MUSTARD. The seed of Brassica nigra. Plant (nat. ord. Cruciferæ). Europe; naturalized in some parts of this country.

Sinapis, powdered, as emetic,	ʒ i.–ij.	3.90–7.80
Charta Sinapis.‖		
Oleum Sinapis Vola'tile.¶	Used in the Liniment.	

* Senna (1 in 10), cassia fistula (1 in 6¼), oil, coriander, tamarind, prune, fig, sugar.

† (Black draught.) Senna 6, manna and sulphate of magnesium āā 12, fennel 2 parts in 100.

‡ (Dose given in U. S. Disp. and in Wood.) The syrup—25 parts senna in 100, flavored with ol. coriandri—is about ⅓ the strength of the fl. ext., and the doses of the two preparations ought, therefore, to differ accordingly.

§ Senna 18, licorice 23.6, oil of fennel .4, washed sulphur 8, sugar ad 100.

‖ Each sq. inch of paper should contain about gr. vi. (*Gm.* 0.40) of mustard.

¶ Ol. sinap. vol. 1, alcohol 60 parts—may be used as a substitute for mustard plaster.

		Gm. Cc.
Linimentum Sinapis Compositum.*		
So'dium.—SODIUM. The metal Sodium is not official.		
Soda (Caustic Soda. Sodium Hydrate).† A caustic solid.		
Φ Soda cum Calce (London Paste).‡ Caustic.		
Liquor Sodæ,§ well diluted,	♏ v.–xv.	0.30–0.90
Liquor Sodæ Chlora'tæ,	See Chlorum.	
So'dii Carbo'nas,‖	gr. x.– ʒ ss.	0.65–1.95
Sodii Carbonas Exsicca'tus,	gr. v.–xv.	0.33–1.
Sodii Bicarbonas,	gr. x.– ʒ i.	0.65–3.90
Trochis'ci Sodii Bicarbona'tis,	1 = gr. iij.	0.20
Pulvis Efferves'cens Compositus,¶	1–2 powders.	
Sodii Ace'tas,	gr. xx.– ʒ ij.	1.30–7.80
Sodii Ben'zoas,	gr. x.– ʒ ss	0.65–1.95
Sodii Boras (Borax),	gr. xxx.–xl.	1.95–2.60
Sodii Chloras,	gr. x.–xx.	0.65–1.30
Sodii Chlo'ridum (salt).	As emetic, ℥ ss–i.	15.–30.
Sodii Nitras,**	pharm. use.	
Sodii Nitris,	gr. i.–iii.	0.06–0.19
Sodii Phosphas,	gr. xx.– ℥ ij.	1.30–60.
Sodii Pyrophos'phas,	pharm. use.	
Sodii Sulphas (Glauber's salt),	℥ ss.–i.	15.–30.
Sodii Sulphocar'bolas,	gr. x.– ʒ ss.	0.65–1.95
Liquor Sodii Silica'tis.††		
Sodii Arsen'as.	See Arsenic.	

* Vol. oil of mustard 3, fluid ext. of mezereum 20, camphor 6, castor oil 15, alcohol ad 100 parts.

† Sodii hypophosphis and iodidum are deliquescent; soda and sodii nitras slightly so.

‡ Equal parts caustic soda and unslaked lime. A powder.

§ Contains about 5% of soda.

‖ (Sal sodæ. Washing soda.)

¶ (Seidlitz powder.) In two papers: one, usually white, contains tartaric acid, gr. 35; the other, usually blue, bicarbonate of sodium, gr. 40, mixed with Rochelle salt, gr. 120.

** (Cubic nitre. Chili saltpetre.)

†† Used in preparing "soluble glass" dressings. Contains about 20% silica, and 10% soda.

		Gm. Cc.
Sodii Bromidum.	See Bromine.	
Sodii Hypophosphis.	See Phosphorus.	
Sodii Iodidum.	See Iodine.	
Sodii Salicylas.	See Salicylic Ac.	
Sodii Sulphis, Sodii Bisulphis, Sodii Hyposulphis.	See Sulphurous Ac.	

Spige'lia.—PINKROOT. The rhizome and rootlets of Spigelia marilandica. A plant (nat. ord. Loganiaceæ). The southern U. S.

Spigelia, powdered,	ʒ i.–ij.	3.90–7.80
Extractum Spige'liæ Fluidum,	ʒ i.–ij.	3.75–7.50

ΦExtractum Spigeliæ et Sennæ Fluidum,* ʒ ij.–℥ ss. 7.50–15.

Staphisa'gria.—STAVESACRE. The seed of Delphinium Staphisagria. A plant (nat. ord. Ranunculaceæ). The south of Europe.

Stillin'gia.—QUEEN'S ROOT. [Yaw Root.] The root of Stillingia Sylvatica. A plant (nat. ord. Euphorbiaceæ). The southern U. S.

Stillingia, powdered,	gr. xv.–ʒ ss.	1.–1.95.
Extractum Stillin'giæ Fluidum,	♏ xv.–xlv.	0.90–2.80

Stramo'nii Fo'lia.—STRAMONIUM LEAVES. The leaves of Datura Stramonium (nat. ord. Solanaceæ).

Burned, and the fumes inhaled.

Stramo'nii Se'men.—STRAMONIUM SEED. The seed of Datura Stramonium. [THORNAPPLE. Jamestown weed. Stinkweed.] A plant (nat. ord. Solanaceæ). Europe and this country.

Extractum Stramonii Seminis,	gr. ¼–½.	0.016–0.03
Extractum Stramonii Seminis Fluidum,	♏ i–iii.	0.06–0.12
Tinctura Stramonii Seminis (1 in 6.6).	♏ x.–xx.	0.60–1.25

Unguentum Stramonii (extract, 1 in 10).

Strontium.—The metal Strontium is not official.

Strontii Bromidum,	gr. v.–x.	0.32–0.65

* U. S. Pharmacopœia, 1870.

		Gm. Cc.
Strontii Iodidum,	gr. v–x.	0.32–0.65
Strontii Lactas,	gr. v.–x.	0.32–0.65

Strophan'thus.—The seed of Strophanthus hispidus. A climbing African plant (nat. ord. Apocynaceæ), deprived of its long awn.

Tinctura Strophanthi (1 in 20).	♏ iii.–x.	0.18–0.62
Φ Strophantinum,	$\frac{1}{120}$–$\frac{1}{60}$	0.0005–0.001

Sty'rax.—STORAX. A balsam prepared from the inner bark of Liquidambar orientalis (Oriental sweet gum tree), (nat. ord, Hamamelaceæ). Asia Minor.

Is an ingredient of Tinct. Benzoini Comp.

Sul'phur.—CRUDE SULPHUR. [Brimstone.] Not official.

Sulphur sublima'tum,*	pharm. use.	
Potas'sa Sulphura'ta,†	gr. ij.–x.	0.13–0.65
Unguentum Sul'phuris,	ʒ in 10.	
Sulphur Lotum,‡	ʒ i.–iij.	3.90–11.65
Sulphuris Io'didum.	External use.	
Sulphur Præcipitatum,§	ʒ i.–iij.	3.90–11.65
Calx Sulphurata,‖	gr. $\frac{1}{10}$–$\frac{1}{2}$.	0.006–0.03

Sum'bul.—SUMBUL. The root of Ferula Sumbul. A plant (nat. ord. Umbelliferæ). Northern India.

Tinctura Sumbul (1 in 10),	♏ xx.–ʒ i.	1.25–3.75

Taba'cum.—TOBACCO. The commercial, dried leaves of Nicotiana Tabacum. A plant (nat. ord. Solanaceæ). Cultivated in most tropical countries.

Tamarin'dus.—TAMARIND. The preserved pulp of the fruit of Tamarindus indica. A large tree (nat. ord. Leguminosæ). East and West Indies, Egypt, and Arabia.

Tamarindus,	ʒ i.–℥ i., or more.	3.90–30.

Is an ingredient of Confectio Sennæ.

* (Flowers of Sulphur.) Always contains a little sulphuric acid.

† (Liver of Sulphur.)

‡ (Washed Sulphur.) Is sulphur sublimatum washed with diluted aq ammoniæ.

§ (Milk of Sulphur.)

‖ See Calcium.

		Gm. Cc.

Tanace'tum.—TANSY. The leaves and tops of Tenaceum vulgare. A plant (nat. ord. Compositæ). Europe; naturalized in this country.

Tanacetum, powdered,	ʒ ss.–i.	1.95–3.90

Tarax'acum.—DANDELION. The root of Taraxacum officinale gathered in autumn. A plant (nat. ord. Compositæ). U. S. and most other countries.

Extractum Tarax'aci,	gr. xx.–ʒ i.	1.30–3.95
Extractum Taraxaci Fluidum,	ʒ i.–iij.	3.75–11.25

Terebe'num.— TEREBENE. ($C_{10}H_{16}$). A colorless or slightly yellowish, thin liquid, having a thyme-like odor, and an aromatic taste. Consists chiefly of Pinene and contains not more than very small proportions of Terpinene and Dipentene.

Terebenum,	♏ iii.–x.	0.18–0.62

Terebin'thina.—TURPENTINE. [Common Frankincense.] A concrete oleoresin obtained from Pinus palustris (a tree: the southern U. S.), and from other species of Pinus (nat. ord. Coniferæ).

Oleum Terebinthinæ.*	External use.	
Oleum Terebinthinæ Rectificatum,†	♏ v.–ʒ ss.	0.30–2.
Resina.	See Resin.	

Linimentum Terebinthinæ (Kentish ointment).‡

Terebin'thina Canaden'sis.—CANADA TURPENTINE. [Balsam of Fir. Canada Balsam.] A liquid oleoresin obtained from Abies balsamea (American silver fir. Balm of Gilead tree), (nat. ord. Coniferæ). Canada and the northern United States.

Is an ingredient of Charta Canth. and of Collodium flexile.

Terpi'ni Hy'dras.—TERPIN HYDRATE. The hydrate of the

* (Spirits of turpentine.) A volatile oil distilled from turpentine. For internal use give the rectified oil.

† Distilled with lime water. When the oil is ordered for internal use, the rectified oil should always be dispensed.

‡ Resin cerate 65, oil of turpentine 35 parts.

		Gm. Cc.
diatomic alcohol Terpin. Colorless, nearly odorless, rhombic prisms, having a slightly aromatic and bitter taste.		
Terpini Hydras,	gr. ii.–x.	0.12–0.65

Thy'mol.—THYMOL. A substance obtained from the oil of thyme and of some other plants. Either in white crystals or as an uncrystallizable liquid.

Thymol.	External use.

Tragacan'tha.—TRAGACANTH. A gummy exudation from Astragalus gummifer, and from other species of A. A small shrub (nat. ord. Leguminosæ). Asia Minor.

Tragacantha, powdered,	Used as vehicles.
Mucilago Tragacan'thæ.	

Trit'icum.—COUCH-GRASS. The rhizome of Agropyrum repens (nat. ord. Gramineæ), gathered in the spring and deprived of its rootlets. Europe; naturalized in the U. S.

Extractum Trit'ici Fluidum,	ʒ i.	3.75

Ul'mus.—ELM. [Slippery Elm. Red Elm.] The inner bark of Ulmus fulva. An indigenous tree (nat. ord. Urticaceæ).

Ulmus, powdered.	As a poultice.
Mucilago Ulmi.	As a drink.

U'va Ur'si.—BEARBERRY. The leaves of Arctostaphylos Uva Ursi. A small evergreen shrub (nat. ord. Ericaceæ). Northern Europe, Asia, and America.

Extractum Uvæ Ursi,	gr. v.–xv.	0.32–1.
Extractum Uvæ Ursi Fluidum,	ʒ ss.–i.	1.90–3.75

Valeria'na.—VALERIAN. The rhizome and rootlets of Valeriana officinalis. A plant (nat. ord. Valerianeæ). Europe; cultivated in the U. S.

Extractum Valerianæ Fluidum,	ʒ i.	3.75
Tinctura Valerianæ (1 in 5),	ʒ i.–℥ ss.	3.75–15.
Tinctura Valerianæ Ammoniata * (1 in 5),	ʒ ss.–i.	1.90–3.75

* Valerian 1, aromatic spirit of ammonia 4 parts.

		Gm. Cc.
Ammo'nii Valeria'nas,	gr. ij.–viij.	0.13–0.52
Ferri Valerianas, Quini'næ Valerianas, Zinci Valerianas,	gr. i.–ij.	0.06–0.13

Vanil'la.—VANILLA. The fruit of Vanilla planifolia. A perennial, climbing plant (nat. ord. Orchideæ). West Indies, Mexico, and S. America; cultivated elsewhere.

Tinctura Vanil'læ (1 in 10). Used for flavoring.

Veratri'na.—VERATRINE. An alkaloid or mixture of alkaloids, prepared from the seeds of Asagræa officinalis. A plant (nat. ord. Liliaceæ). Mexico.

Oleatum Veratri'næ,* 1 in 50.

Unguentum Veratrinæ, 1 in 25.

Vera'trum Vir'ide.—AMERICAN HELLEBORE. [Green Hellebore. Indian Poke.] The rhizome and rootlets of Veratrum viride. An indigenous plant (nat. ord. Liliaceæ).

Extractum Vera'tri Vir'idis Fluidum,	♏ i.–ij.	0.06–0.12
Tinctura Veratri Viridis (2 in 5),	♏ iij.–viij.	0.18–0.50

℗ Norwood's Tincture of Veratrum Viride.†

Vibur'num Op'ulus.—CRAMP BARK. The bark of Viburnum opulus (nat. ord. Caprifoliaceæ).

Extractum Viburni Opuli Fluidum,	ʒ i.–ii.	3.70–7.40

Viburnum Prunifo'lium.—BLACK HAW. The bark of Viburnum Prunifolium. An indigenous shrub (nat. ord. Caprifoliaceæ).

Extractum Viburni Prunifolii Fluidum,	ʒ ss.–i.	1.90–3.75

Vitel'lus.—YOLK OF EGG. The yolk of the egg of Gallus Bankiva, *var.* domestica.

Glyceritum Vitel'li.‡ Used as a vehicle, and externally.

* Veratine 1, oleic acid 49 parts.

† One tenth stronger than the official tincture. Is of the same strength as the tincture official in 1870.

‡ (Glyconin.) Fresh yolk of egg 9, glycerin 11 parts.

		Gm. Cc.

Xanthox'ylum.—PRICKLY ASH. [Toothache tree. Suterberry.] The bark of Xanthoxylum Americanum and X. Clava-Herculis. Tall indigenous shrubs (nat. ord. Rutaceæ).

Xanthoxylum, powdered,	gr. x.–ʒ ss.	0.65–1.95
Extractum Xanthox'yli Fluidum,	ʒ ss.–i.	1.90–3.75

Zea.—CORN-SILK. The styles and stigmas of Zea Mays (corn, maize) (nat. ord. Gramineæ).

Zin'cum.—ZINC. [Speltre.] Metallic Zinc in the form of sheets, or irregular granulated pieces.

Zin'ci Ox'idum,*	gr. ij.–viij.	0.13–0.52
Unguentum Zinci Ox'idi,	1 in 5.	
Zinci Ace'tas.	Astringent.	
Zinci Carbo'nas Præcipita'tus.†	Pharm. use.	
Zinci Chlo'ridum (Butter of Zinc).‡	Caustic.	
Liquor Zinci Chlo'ridi.§	External use.	
Zinci Io'didum,‖	gr. ss.–ij.	0.03–0.13
Zinci Sulphas (White Vitriol),¶	gr. i.–ʒ ss.	0.06–1.95
Zinci Valeria'nas,	gr. i.–ij.	0.06–0.13
Zinci Bro'midum.	See Bromum.	
Zinci Phos'phidum.	See Phosphorus.	

Oleatum Zinci (zinc oxide 1 in 20).

Zin'giber.—GINGER.** The rhizome of Zingiber officinale. A plant (nat. ord. Scitamineæ). Hindostan; cultivated in both East and West Indies, and in Africa.

* Tutty is the impure oxide of zinc.

† Calamine is the impure native carbonate of zinc.—*U. S. Disp., and Wood.* Hooker's chemistry calls calamine the silicate of zinc.

‡ Is deliquescent. "Canquoin's paste," prepared according to the French Codex, is equal weights of zinc chloride and wheat flour, with a little water.

§ Contains about 50% of chloride of zinc.

‖ Is deliquescent.

¶ As emetic, the dose is from gr. x. to ʒ ss. (*Gm.* 0.65-1.95).

** "Green ginger is the fresh rhizome. Black ginger is the rootstock, dried with the epidermis on; the white or Jamaica ginger is the same, deprived of its epidermis.—Wood.

		Gm. Cc.
Zingiber, powdered,	gr. x.–xx.	0.65–1.30
Oleoresi'na Zingib'eris,*	♏ ss.–ij.	0.03–0.12
Extractum Zingiberis Fluidum,	♏ x.–xx.	0.60–1.25
Syrupus Zingiberis,†	ʒ i. or more.	3.75
Tinctura Zingiberis (1 in 5),	ʒ ss.–i.	1.90–3.75
Trochis'ci Zingiberis,	1 = ♏ iij. of the Tincture.	

* Dose should not exceed a minim (*C.c.* 0.06), and should be much diluted.—U. S. Disp.

† Contains fl. extract of ginger, 3 parts in 100.

TABLE OF THE SOLUBILITY OF CHEMICALS IN WATER AND IN ALCOHOL.

Abbreviations : s. = soluble ; ins. = insoluble ; sp. = sparingly ; v. = very ; alm. = almost ; dec. = decomposed.

TAKEN, BY PERMISSION, FROM THE U. S. PHARMACOPŒIA.

CHEMICALS.	WATER.		ALCOHOL.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in :	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Acidum Arsenosum	30–80	15	sp.	sp.
" Benzoicum	500	15	2	1
" Boricum	25	3	15	5
" Carbolicum	15–20	—	v. s.	v. s.
" Chromicum	v. s.	v. s.	dec.	dec.
" Citricum	0.63	0.4	1.6	1.43
" Gallicum	100	3	5.	1.
" Salicylicum	450	14	2.4	v. s.
" Tannicum	1	v. s.	0.6	v. s.
" Tartaricum	0.8	0.5	2.5	0.2

Alumen	9	0.3	ins.	ins.
" Exsiccatum	20	0.7	ins.	ins.
Aluminii Hydras	ins.	ins.	ins.	ins.
" Sulphas	1.2	v. s.	ins.	ins.
Ammonii Benzoas	5	1.2	28	7.6
" Bromidum	1.5	0.7	30	15
" Carbonas	5	dec.	dec.	dec.
" Chloridum	3	1	alm. ins.	alm. ins.
" Iodidum	1	0.5	9	3.7
" Nitras	0.5	v. s.	20	3
" Valerianas	v. s.	v. s.	v. s.	v. s.
Antimonii et Potassi Tartras	17	3	ins.	ins.
" Oxidum	alm. ins.	alm. ins.	ins.	ins.
" Sulphidum	ins.	ins.	ins.	ins.
" Sulphidum Purificatum	ins.	ins.	ins.	ins.
Antimonium Sulphuratum	ins.	ins.	ins.	ins.
Apomorphinæ Hydrochloras	45	dec.	45	dec.
Argenti Cyanidum.	ins.	ins.	ins.	ins.
" Iodidum	ins.	ins.	ins.	ins.
" Nitras	0.6	0.1	26	5
" " Fusus	0.6	0.1	26	5
" Oxidum	v. sp.	v. sp.	ins.	ins.
Arseni Iodidum	7.	dec.	30	dec.
Atropina	130	—	3	—
Atropinæ Sulphas	0.4	v. s.	6.2	v. s.
Bismuthi Citras	ins.	ins.	ins.	ins.
" et Ammonii Citras	v. s.	v. s.	sp.	sp.

TABLE OF THE SOLUBILITY OF CHEMICALS.—*Continued.*

Chemicals.	Water.		Alcohol.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in :	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Bismuthi Subcarbonas	ins.	ins.	ins.	ins.
" Subnitras	alm. ins.	alm. ins.	ins.	ins.
Bromum	30	—	dec.	dec.
Caffeina	80	9.5	33	v. s.
Calcii Bromidum	0.7	v. s.	1	v. s.
" Carbonas Præcipitatus	alm. ins.	alm. ins.	ins.	ins.
" Chloridum	1.5	v. s.	8	1.5
" Hypophosphis	6.8	6	ins.	ins.
" Phosphas Præcipitatus	alm. ins.	dec.	ins.	ins.
Calx	750	1300	ins.	ins.
Camphora	alm. ins.	alm. ins.	v. s.	v. s.
" Monobromata	alm. ins.	alm. ins.	v s.	v. s.
Cerii Oxalas	ins.	ins.	ins.	ins.
Chloral	v. s.	v. s.	v. s.	v. s.
Chrysarobinum	alm. ins.	alm. ins.	sp.	150
Cinchonidinæ Sulphas	70	1.42	66.	8.
Cinchonina	alm. ins.	alm. ins.	116	26.5
Cinchoninæ Sulphas	66	13.5	10	3.25

Cocainæ Hydrochloras	.48	v. s.	3.5	v. s.
Codeina	80	17	3	v. s.
Creta Præparata	alm. ins.	alm. ins.	ins.	ins.
Cupri Sulphas	2.6	0.5	alm. ins.	alm. ins.
Elaterinum	alm. ins.	alm. ins.	337	34.
Ferri Chloridum	v. s.	v. s.	v. s	v. s.
" Citras	s.	v. s.	ins.	ins.
" et Ammonii Citras	v. s.	v. s.	ins.	ins.
" " " Sulphas	3	0.8	ins.	ins.
" " " Tartras	v. s.	v. s.	ins.	ins.
" " Potassii Tartras	v. s.	v. s.	ins.	ins.
" " Quininæ Citras	s.	v. s.	alm. ins.	alm. ins.
" " " " Solubilis	v. s.	v. s.	sp.	sp.
" " Strychninæ Citras	v. s.	v. s.	alm. ins.	alm. ins.
" Hypophosphis	sp.	sp.	—	—
" Iodidum Saccharatum	7	—	alm. ins.	—
" Lactas	40	12	alm. ins.	alm. ins.
" Phosphas Solubilis	v. s.	v. s.	ins.	ins.
" Pyrophosphas Solubilis	v. s.	v. s.	ins.	ins.
" Sulphas	1.8	0.3	ins.	ins.
" " Granulatus	1.8	0.3	ins.	ins.
" Valerianas	ins.	dec.	v. s.	v. s.
Hydrargyri Chloridum Corrosivum	16	2	3	1.2
" " Mite	ins.	ins.	ins.	ins.
" Cyanidum	12.8	3	15	6
" Iodidum Flavum	alm. ins.	alm. ins.	ins.	ins.
" " Rubrum	alm. ins.	alm. ins.	130	15

TABLE OF THE SOLUBILITY OF CHEMICALS.—*Continued.*

CHEMICALS.	WATER.		ALCOHOL.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in:	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Hydrargyri Oxidum Flavum	alm. ins.	alm. ins.	ins.	ins.
" " Rubrum	alm. ins.	alm. ins.	ins.	ins.
" Subsulphas Flavus	2000	600	ins.	ins.
Hydrargyrum Ammoniatum	alm. ins.	alm. ins.	alm. ins.	alm. ins.
Hydrastininæ Hydrochloras	0.3	—	3	—
Hyoscinæ Hydrobromas	1.9	—	13.	—
Hyoscyaminæ Hydrobromas	0.3	—	2	—
" Sulphas	0.5	v. s.	2.5	v. s.
Iodoformum	alm. ins.	alm. ins.	52.	12.
Iodum	sp.	—	10.	—
Lithii Benzoas	4	2.5	12	10
" Bromidum	0.6	0.3	v. s.	v. s.
" Carbonas	80	140	ins.	ins.
" Citras	2	2.5	alm. ins.	alm. ins.
" Salicylas	v. s.	v. s.	v. s.	v. s.
Magnesia	alm. ins.	alm. ins.	ins.	ins.
" Ponderosa	alm. ins.	alm. ins.	ins.	ins.
Magnesii Carbonas	alm. ins.	alm. ins.	ins.	ins.

Magnesii Citras Effervescens	2	v. s.	alm. ins.	alm. ins.
" Sulphas	1.5	0.7	ins.	ins.
" Sulphis	20	19	ins.	ins.
Mangani Dioxidum	ins.	ins.	ins.	ins.
Mangani Sulphas	0.8	1	ins.	ins.
Menthol	sp.	sp.	v. s.	v. s.
Methyl Salicylas	—	—	v. s.	v. s.
Morphina	v. sp.	455	300	36
Morphinæ Acetas	2.5	1.5	47.6	14
" Hydrochloras	24	0.5	62	31
" Sulphas	21	0.75	702	144
Naphthalinum	ins.	ins.	15	v. s.
Naphtol	1000.	75	0.75	v. s.
Pancreatinum	S.	S.	ins.	ins.
Paraldehydum	8.5	16.5	v. s.	v. s.
Pepsinum	100	—	ins.	ins.
Phosphorus	ins.	ins.	350	240
Physostigminæ Salicylas	150	30	12	v. s.
Physostigminæ Sulphas	v s.	v. s.	v. s.	v. s.
Picrotoxinum	240	25	9	3
Pilocarpinæ Hydrochloras	v. s.	v. s.	v. s.	v. s.
Piperinum	alm. ins.	alm. ins.	30	1
Plumbi Acetas	2.3	0.5	21	1
" Carbonas	ins.	ins.	ins.	ins.
" Iodidum	2000	200	v. sp.	v. sp.
" Nitras	2	0.75	alm. ins.	alm. ins.
" Oxidum	alm. ins.	alm. ins.	ins.	ins.

TABLE OF THE SOLUBILITY OF CHEMICALS.—*Continued.*

CHEMICALS.	WATER.		ALCOHOL.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in :	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Potassa	0.5	v. s.	2	v. s.
Potassii Acetas	0.36	v. s.	1.9	v. s.
" Bicarbonas	3.2	dec.	alm. ins.	alm. ins.
" Bichromas	10	1.5	ins.	ins.
" Bitartras	201	16.7	v. sp.	v. sp.
" Bromidum	1.6	1	200	16
" Carbonas	1.1	0.65	ins.	ins.
" Chloras	16.7	1.7	v. sp.	v. sp.
" Citras	0.6	v. s.	v. sp.	v. sp.
" Cyanidum	2	1 (dec.)	sp.	sp.
" et Sodii Tartras	1.4	v. s.	alm. ins.	alm. ins.
" Ferrocyanidum	4	2	ins.	ins.
Potassii Hypophosphis	0.6	0.3	7.3	3.6
" Iodidum	0.75	0.5	18	6
" Nitras	3.8	0.4	alm. ins.	alm. ins.
" Permanganas	16	3	dec.	dec.
" Sulphas	9.5	4	ins.	ins.
Pyrogallol	1.7	v. s.	1	v. s.

Alumen	9	0.3	ins.	ins.
" Exsiccatum	20	0.7	ins.	ins.
Aluminii Hydras	ins.	ins.	ins.	ins.
" Sulphas	1.2	v. s.	ins.	ins.
Ammonii Benzoas	5	1.2	28	7.6
" Bromidum	1.5	0.7	30	15
" Carbonas	5	dec.	dec.	dec.
" Chloridum	3	1	alm. ins.	alm. ins.
" Iodidum	1	0.5	9	3.7
" Nitras	0.5	v. s.	20	3
" Valerianas	v. s.	v. s.	v. s.	v. s.
Antimonii et Potassi Tartras	17	3	ins.	ins.
" Oxidum	alm. ins.	alm. ins.	ins.	ins.
" Sulphidum	ins.	ins.	ins.	ins.
" Sulphidum Purificatum	ins.	ins.	ins.	ins.
Antimonium Sulphuratum	ins.	ins.	ins.	ins.
Apomorphinæ Hydrochloras	45	dec.	45	dec.
Argenti Cyanidum	ins.	ins.	ins.	ins.
" Iodidum	ins.	ins.	ins.	ins.
" Nitras	0.6	0.1	26	5
" " Fusus	0.6	0.1	26	5
" Oxidum	v. sp.	v. sp.	ins.	ins.
Arseni Iodidum	7.	dec.	30	dec.
Atropina	130	—	3	—
Atropinæ Sulphas	0.4	v. s.	6.2	v. s.
Bismuthi Citras	ins.	ins.	ins.	ins.
" et Ammonii Citras	v. s.	v. s.	sp.	sp.

TABLE OF THE SOLUBILITY OF CHEMICALS.—*Continued.*

CHEMICALS.	WATER.		ALCOHOL.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in :	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Bismuthi Subcarbonas	ins.	ins.	ins.	ins.
" Subnitras.	alm. ins.	alm. ins.	ins.	ins.
Bromum	30	—	dec.	dec.
Caffeina	80	9.5	33	v. s.
Calcii Bromidum	0.7	v. s.	1	v. s.
" Carbonas Præcipitatus	alm. ins.	alm. ins.	ins.	ins.
" Chloridum	1.5	v. s.	8	1.5
" Hypophosphis	6.8	6	ins.	ins.
" Phosphas Præcipitatus	alm. ins.	dec.	ins.	ins.
Calx	750	1300	ins.	ins.
Camphora	alm. ins.	alm. ins.	v. s.	v. s.
" Monobromata	alm. ins.	alm. ins.	v. s.	v. s.
Cerii Oxalas	ins.	ins.	ins.	ins.
Chloral	v. s.	v. s.	v. s.	v. s.
Chrysarobinum	alm. ins.	alm. ins.	sp.	150
Cinchonidinæ Sulphas	70	1.42	66.	8.
Cinchonina	alm. ins.	alm. ins.	116	26.5
Cinchoninæ Sulphas	66	13.5	10	3.25

Cocainæ Hydrochloras	.48	v. s.	3.5	v. s.
Codeina	80	17	3	v. s.
Creta Præparata	alm. ins.	alm. ins.	ins.	ins.
Cupri Sulphas	2.6	0.5	alm. ins.	alm. ins.
Elaterinum	alm. ins.	alm. ins.	337	34.
Ferri Chloridum	v. s.	v. s.	v. s	v. s.
" Citras	s.	v. s.	ins.	ins.
" et Ammonii Citras	v. s.	v. s.	ins.	ins.
" " " Sulphas	3	0.8	ins.	ins.
" " " Tartras	v. s.	v. s.	ins.	ins.
" " Potassii Tartras	v. s.	v. s.	ins.	ins.
" " Quininæ Citras	s.	v. s.	alm. ins.	alm. ins.
" " " " Solubilis	v. s.	v. s.	sp.	sp.
" " Strychninæ Citras	v. s.	v. s.	alm. ins.	alm. ins.
" Hypophosphis	sp.	sp.	—	—
" Iodidum Saccharatum	7	—	alm. ins.	—
" Lactas	40	12	alm. ins.	alm. ins.
" Phosphas Solubilis	v. s.	v. s.	ins.	ins.
" Pyrophosphas Solubilis	v. s.	v. s.	ins.	ins.
" Sulphas	1.8	0.3	ins.	ins.
" " Granulatus	1.8	0.3	ins.	ins.
" Valerianas	ins.	dec.	v. s.	v. s.
Hydrargyri Chloridum Corrosivum	16	2	3	1.2
" " Mite	ins.	ins.	ins.	ins.
" Cyanidum	12.8	3	15	6
" Iodidum Flavum	alm. ins.	alm. ins.	ins.	ins.
" " Rubrum	alm. ins.	alm. ins.	130	15

TABLE OF THE SOLUBILITY OF CHEMICALS.—*Continued.*

CHEMICALS.	WATER.		ALCOHOL.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in :	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Hydrargyri Oxidum Flavum	alm. ins.	alm. ins.	ins.	ins.
" " Rubrum	alm. ins.	alm. ins.	ins.	ins.
" Subsulphas Flavus	2000	600	ins.	ins.
Hydrargyrum Ammoniatum	alm. ins.	alm. ins.	alm. ins.	alm. ins.
Hydrastininæ Hydrochloras	0.3	—	3	—
Hyoscinæ Hydrobromas	1.9	—	13.	—
Hyoscyaminæ Hydrobromas	0.3	—	2	—
" Sulphas	0.5	v. s.	2.5	v. s.
Iodoformum	alm. ins.	alm. ins.	52.	12.
Iodum	sp.	—	10.	—
Lithii Benzoas	4	2.5	12	10
" Bromidum	0.6	0.3	v. s.	v. s.
" Carbonas	80	140	ins.	ins.
" Citras	2	2.5	alm. ins.	alm. ins.
" Salicylas	v. s.	v. s.	v. s.	v. s.
Magnesia	alm. ins.	alm. ins.	ins.	ins.
" Ponderosa	alm. ins.	alm. ins.	ins.	ins.
Magnesii Carbonas	alm. ins.	alm. ins.	ins.	ins.

Magnesii Citras Effervescens	2	v. s.	alm. ins.	alm. ins.
" Sulphas	1.5	0.7	ins.	ins.
" Sulphis	20	19	ins.	ins.
Mangani Dioxidum	ins.	ins.	ins.	ins.
Mangani Sulphas	0.8	1	ins.	ins.
Menthol	sp.	sp.	v. s.	v. s.
Methyl Salicylas	—	—	v. s.	v. s.
Morphina	v. sp.	455	300	36
Morphinæ Acetas	2.5	1.5	47.6	14
" Hydrochloras	24	0.5	62	31
" Sulphas	21	0.75	702	144
Naphthalinum	ins.	ins.	15	v. s.
Naphtol	1000.	75	0.75	v. s.
Pancreatinum	S.	S.	ins.	ins.
Paraldehydum	8.5	16.5	v. s.	v. s.
Pepsinum	100	—	ins.	ins.
Phosphorus	ins.	ins.	350	240
Physostigminæ Salicylas	150	30	12	v. s.
Physostigminæ Sulphas	v s.	v. s.	v. s.	v. s.
Picrotoxinum	240	25	9	3
Pilocarpinæ Hydrochloras	v. s.	v. s.	v. s.	v. s.
Piperinum	alm. ins.	alm. ins.	30	1
Plumbi Acetas	2.3	0.5	21	1
" Carbonas	ins.	ins.	ins.	ins.
" Iodidum	2000	200	v. sp.	v. sp.
" Nitras	2	0.75	alm. ins.	alm. ins.
" Oxidum	alm. ins.	alm. ins.	ins.	ins.

TABLE OF THE SOLUBILITY OF CHEMICALS.—*Continued.*

CHEMICALS.	WATER.		ALCOHOL.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in :	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Potassa	0.5	v. s.	2	v. s.
Potassii Acetas	0.36	v. s.	1.9	v. s.
" Bicarbonas	3.2	dec.	alm. ins.	alm. ins.
" Bichromas	10	1.5	ins.	ins.
" Bitartras	201	16.7	v. sp.	v. sp.
" Bromidum	1.6	1	200	16
" Carbonas	1.1	0.65	ins.	ins.
" Chloras	16.7	1.7	v. sp.	v. sp.
" Citras	0.6	v. s.	v. sp.	v. sp.
" Cyanidum	2	1 (dec.)	sp.	sp.
" et Sodii Tartras	1.4	v. s.	alm. ins.	alm. ins.
" Ferrocyanidum	4	2	ins.	ins.
Potassii Hypophosphis	0.6	0.3	7.3	3.6
" Iodidum	0.75	0.5	18	6
" Nitras	3.8	0.4	alm. ins.	alm. ins.
" Permanganas	16	3	dec.	dec.
" Sulphas	9.5	4	ins.	ins.
Pyrogallol	1.7	v. s.	1	v. s.

Quinidinæ Sulphas	100	7	8	v. s.
Quinina	1670	760	6	2
Quininæ Bisulphas	10	v. s.	32	v. s.
" Hydrobromas	54	v. s.	0.6	v. s.
" Hydrochloras	34	1	3	v. s.
" Sulphas	740	30	65	3
" Valerianas	100	40	5	1
Saccharum	0.5	0.2	175	28
" Lactis	6	1	ins.	ins.
Salicinum	28	0.7	30	2
Salol	alm. ins.	alm. ins.	10	v. s.
Santoninum	alm. ins.	250	40	3
Soda	1.7	0.8	v. s.	v. s.
Sodii Acetas	1.4	0.5	30	2
" Arsenias	4	v. s.	v. sp.	60
" Benzoas	1.8	1.3	45	20
" Bicarbonas	11.3	dec.	ins.	ins.
" Bisulphis	4	2	72	49
" Boras	16	0.5	ins.	ins.
" Bromidum	1.2	0.5	13	11
" Carbonas	1.6	0.2	ins.	ins.
" Chloras	1.1	0.5	100	40
" Chloridum	2.8	2.5	alm. ins.	alm. ins.
" Hypophosphis	1	0.12	30	1
" Hyposulphis	0 65	dec.	ins.	ins.
" Iodidum	0.6	0.33	3	1.4
" Nitras	1.3	0.6	100	40

TABLE OF THE SOLUBILITY OF CHEMICALS.—*Continued.*

Chemicals.	Water.		Alcohol.	
	At 15° C. (59° F.).	Boiling.	At 15° C. (59° F.).	Boiling.
One part is soluble in :	*Parts.*	*Parts.*	*Parts.*	*Parts.*
Sodii Nitris	1.5	v. s.	sp.	sp.
" Phosphas	5.8	1.5	ins.	ins.
" Pyrophosphas	12	1.1	ins.	ins.
" Salicylas	0.9	v. s.	6	v. s.
" Sulphas	2.8	0.47	ins.	ins.
" Sulphis	4	0.9	sp.	sp.
" Sulphocarbolas	4.8	0.7	132	10
Sparteinæ Sulphas	v. s.	v. s.	v. s.	v. s.
Strontii Bromidum	1.05	0.5	v. s.	v. s.
" Iodidum	0.6	0.27	s.	s.
" Lactas	4	0.5	s.	s.
Strychnina	6700	2500	110	12
Strychninæ Sulphas	50	2	109	8.5
Sulphur Lotum	ins.	ins.	v. sp.	v. sp.
" Præcipitatum	ins.	ins.	v. sp.	v. sp.
" Sublimatum	ins.	ins.	v. sp.	v. sp.
Terebenum	v. sp.	v. sp.	1	1
Terpini Hydras	250	32	10	2

Thymol	1200	—	1	—
Veratrina	v. sp.	v. sp.	3	v. s.
Zinci Acetas	2.7	1.5	36	3
" Bromidum	v. s.	v. s.	v. s.	v. s.
" Carbonas Præcipitatus	ins.	ins.	ins.	ins.
" Chloridum	0.3	v. s.	v. s.	v. s.
" Iodidum	v. s.	v. s.	v. s.	v. s.
" Oxidum	ins.	ins.	ins.	ins.
" Phosphidum	ins.	ins.	ins.	ins.
" Sulphas	0.6	0.2	ins.	ins.
" Valerianas	100	—	40	—

AN EASY METHOD

OF

WRITING PRESCRIPTIONS

IN THE

METRIC SYSTEM.

THE metric system of weights and measures will be the system of the future in this country, as elsewhere. No one now doubts this, and it is quite unnecessary to dwell upon the importance of mastering the art of expressing quantities in gravimetric and volumetric terms.

It is well, therefore, to learn the doses of drugs in grams and centigrams rather than in grains; since those who have done this, and who desire to write prescriptions in the metric system, will not be obliged constantly to calculate from grains and minims to grams, and from minims to cubic centimeters.

Very many practitioners and students, however, have learned the apothecaries' system alone. These

find it annoying to make the calculation mentioned, and generally they do not use the metric system although well aware of the advantages over the other which it possesses.

It is the object of this chapter to describe a simple method, which the author has never seen in print, whereby the use of the metric is made easier than that of the apothecaries' system to those in the habit of writing prescriptions in the latter.

It may perhaps not be amiss to premise a few facts relating to the French system.

A meter (= 39.37 inches) is one ten-millionth part of the distance from pole to equator.

A gram (abbreviated Gm.) is the weight of one cubic centimeter (written C. c.) of water at 4° C.—the temperature at its greatest density.

Gram and cubic centimeter are, therefore, terms of a like value; the former referring to metric weight, the latter to metric measure. In prescription-writing, the cubic centimeter (sometimes called fluidgram) may be taken as a unit for fluids, just as the gram is for solids or fluids.

The system is a decimal one, as the two subjoined tables show:

METRIC WEIGHTS.

		Gm.
Milligram	= $\frac{1}{1000}$ of the unit, written	.001
Centigram	= $\frac{1}{100}$ " " " "	.01
Decigram	= $\frac{1}{10}$ " " " "	.1
Gram	= the unit	1

METRIC MEASURES OF CAPACITY.

Milliliter (cubic centimeter)	= $\frac{1}{1000}$	of the unit.
Centiliter	= $\frac{1}{100}$	" " "
Deciliter	= $\frac{1}{10}$	" " "
Liter (= 1000 C.c.—about a quart)	=	the unit.

The names of the multiples of the unit, not being used in prescription-writing, are not added to these tables.

RELATIVE VALUE OF APOTHECARIES' WEIGHTS AND GRAMS.

Practically, one gram is equal to 15 grains Troy (more exactly 15.432), therefore:

Gr. i. =	.06 grams,	exactly	.06479
ʒ i. =	4. "	"	3.8874
℥ i. =	31. "	"	31.103

The foregoing being understood, we next proceed to explain the simple method aforesaid.

A two-ounce bottle is supposed to contain 16 doses of a drachm (teaspoonful) each. In reality, however, 15 is nearer the fact, since the average teaspoon holds more than a drachm.

If, now, we order a two-ounce bottle with a teaspoonful dose, each dose to contain *one grain* of any substance, the whole amount of that substance ordered will be 15 grains: which is equal to *one gram*.

So for each dose of a *grain* or *minim* let us order a *gram* of the substance desired—and the prescription is finished.

Example: *Gm.*

℞ Ammon. Carb. (gr. i. in each dose), 1
Ext. Scillæ Fl. (♏ iss. " " "), 1 5
Ext. Senegæ Fl. (♏ v. " " "), 5
Tr. Opii Camph. (♏ xij. " " "), 12
Aq. Cinnamomi (*ad* ℥ ij.), *ad* 60

M. S. Teaspoonful a dose.

If we wish to order a four-ounce bottle, with a dessertspoonful dose, the same holds true: the bottle and the dose being each twice as large as in the case just given.

With an eight-ounce bottle and tablespoonful dose, the same rule, of course, applies.*

Example: *Gm.*

℞ Ext. Scillæ Fl. (♏ i. in each dose), 1
Ext. Glycyrrh. Fl. (♏ x. " " "), 10
Aq. Laurocerasi (♏xl. " " "), 40
Aq. (*ad* ℥ viij.), *ad* 250

M. S. Tablespoonful a dose,

If it is desired to give a two-ounce bottle with a tablespoonful dose, it is merely necessary to order one quarter as many grams as before;—the dose, a tablespoonful, being four times the usual size. If a four-ounce bottle and teaspoonful dose, order twice as many grams as usual; if, on the other hand, it is a four-ounce bottle and tablespoonful dose, order half as many grams as usual. If a six-ounce bottle and teaspoonful dose, order three times as many grams as usual.

* Apothecaries as a rule keep only two-, four-, six-, and eight-ounce bottles—the odd numbers, one and three, being rarely ordered. There are no five- and seven-ounce bottles made.

It is needless to suppose more cases; the principle will be evident to all.

Example:		*Gm.*
℞ Acid. Hydrocyan. Dil.	(♏ ss. in each dose),	1
Ext. Ipecac. Fl.	(♏ ¾ " " "),	1 5
Syrupi Scillæ	(♏ xxv. " " "),	50
Mist. Glycyrrh. Comp.	(*ad* ℥ iv.), *ad*	120

M. S. Teaspoonful a dose.

Let the reader complete by the apothecaries' system the preceding prescriptions, and it will be seen at once how much simpler is the metric method just described. No multiplying of grains or minims and reducing to drachms, etc., is needed, and a glance at the column of grams shows instantly the number of grains or minims in each dose.

It is much simpler, moreover, than laboriously to find the total amount of grains, drachms, etc., required in the prescription, and then to change these into grams and fractions thereof, according to the metric method ordinarily given in handbooks on prescription-writing.

Upon examination, it will be found that the figures obtained by the use of this method, while not entirely exact, are quite sufficiently so for practical purposes. Moreover, the error, which is insignificant in amount, is on the side of safety.

For example, in ordering an ℥ viij. bottle with a ʒ i. dose, each dose to contain one grain of opium, the total amount of opium ordered would be 64 grains; whereas, by this metric method, the pre-

scriber would write for 4 grams, which is, exactly, equivalent to 61.728 grains.

There remains one subject for consideration. Suppose we wish to order some fluid of a sp. gr. quite different from that of water :—syrup, for instance. A given weight—say sixteen grams—of syrup does not have the same bulk as 16 grams of water, but is only equal in bulk to 12 grams of water, since syrup is one third heavier than water. Hence it is evident that, desiring a certain *bulk* of syrup in our prescription, we must order one third more of it than we would of a fluid having a sp. gr. like that of water.

In the case of glycerin, which is one quarter heavier than water, we must order one quarter more of it.

For example, suppose that in the following prescription we wish to administer an equal bulk each of glycerin and aq. cinnamomi :

		Gm.
℞	Tr. Ferri Chlor. (♏ v. in each dose),	5
	Kali Chlorat. (gr. iij. " " "),	3
	Aq. Cinnamomi (♏ xl. " " ").	40
	Glycerini (♏ 40 + ¼ of 40 = 50),	50
	Aq. (*ad* ℥ viij.), *ad*	250
M.	S. Tablespoonful a dose.	

Practically, these two corrections—for glycerin and for syrups—are the only ones that need be made in prescription-writing; the difference in bulk being so slight, in the case of other fluids

commonly used in medication, that it may be ignored.

The subjoined table, taken from Mann's *Prescription Writing*, is introduced, however, as being of interest.

To get a bulk of any of the following drugs equivalent to that of a given weight of water, we must order by weight of

Spirits, Tinctures, and Oils,	$\frac{9}{10}$ or $\frac{1}{10}$ less	than the weight of the same bulk of water.
Ether,	$\frac{3}{4}$ " $\frac{1}{4}$ "	
Spirit of Nitric Ether, Comp'd Spirit of Ether,	$\frac{4}{5}$ " $\frac{1}{5}$ "	
Glycerin,	$\frac{5}{4}$ " $\frac{1}{4}$ more	
Syrups,	$\frac{4}{3}$ " $\frac{1}{3}$ "	
Chloroform,	$\frac{3}{2}$ " $\frac{1}{2}$ "	

We may, if we wish, avoid even the slight calculation necessary in writing for a desired bulk of syrups or glycerin, by ordering *cubic centimeters* instead of *grams*, provided the prescription be for fluids alone.

Example :		*C.c.*
℞	Tinct. Nucis Vomicæ (♏ iij. in a dose),	3
	Tinct. Cinchonæ Comp. (ʒ i. " " "),	60
	Syrp. Sarsaparillæ Comp. (ʒ ij. " " "),	120
	Aq. (*ad* ℥ viij.), *ad*	250
M.	S. Tablespoonful a dose.	

Otherwise, if both solids and liquids are needed in the prescription, we may write thus :

				Gm. *C.c.*
℞	Pulv. Rhei	(gr. v.	in a dose),	5
	Na. Bicarb.	(gr. x.	" " "),	10
	Bism. Subnitr.	(gr. xij.	" " "),	12
	Syrup. Tolu.	(ʒ i.	" " "),	60
	Aq. (*ad* ℥ viij.), *ad*			250

M. S. "Shake." Tablespoonful a dose.

The apothecary, in filling a prescription for grams, puts the bottle in his scale and balances it with shot; then puts in the required weight, and pours in the required medicine until it balances; then another weight, and so on.

If, instead of grams, cubic centimeters be ordered, he does not weigh but measures out the desired amount in a graduate marked in cubic centimetres.

Many druggists, particularly in the country, do not keep the metric weights, but only these graduates; and when they have to dispense a metric prescription, simply measure out, in the case of fluids, the same number of C. c. that the prescription demands of grams; and in the case of solids, they calculate from grams to grains and then weigh out an equivalent number of grains or scruples, etc.

Thus far we have spoken only of the easy mode of metric writing as applied to solutions or to fluid mixtures. It may be made equally to apply to powders, pills, and similar preparations.

Order your prescription on a basis of 15 powders or pills; then each *grain* desired in a single pill or

powder will correspond with one *gram* in the sum total.

Example:		*Gm.*
℞ Na. Bicarb.	(gr. ij. in each powder),	2
Pulv. Aromat.	(gr. iv. " " "),	4
Bismuthi Subnitr.	(gr. vi. " " "),	6
M. Div. in pulv. no. xv.		

If we wish to write for a number of powders greater or less than 15, it is only necessary to increase or diminish the number of grams accordingly —thus, if we would order one third more powders (20), we simply write for one third more grams ; if we want two thirds less powders (5) order two thirds less grams ; if double the powders, double the grams, and so on. For the sake of simplicity it is well to order of the powders a number which is either a factor or multiple of a factor of 15.

Example :		*Gm.*
℞ Calomel	(gr. i. in each powder ; less $\frac{1}{8}$ = gr. $\frac{2}{3}$),	0.65
Pulv. Rhei	(gr. vi. " " " " $\frac{1}{8}$ = gr. iv.),	4
Cretæ Præp	(gr. iij. " " " " $\frac{1}{8}$ = gr. ij.),	2
M. Div. in pulv. no. x. ($15 - \frac{1}{8}$ of $15 = 10$).		

In writing for dry preparations by the method just described, there is a slight error (unimportant in amount) in the sum total of grams. However, since it is not on the side of safety, it is as well to bear it in mind. Namely, for every grain we order in a dose, we get about $1\frac{1}{35}$ grain ; since one gram equals 15.432 grains.

SOME DANGEROUS ABBREVIATIONS

	MAY MEAN
Acid. Hydroc.	Acidum Hydrochloricum, or Acidum Hydrocyanicum.
Aconit.	Aconitine. Aconiti Radix. Aconiti Folia.
Ammon.	Ammonia (alkali). Ammoniac (gum-resin).
Aq. Chlor.	Aqua Chlori. Aqua Chloriformi.
Aq. Fontis.	May be read Aqua Fortis.
Calc. Chlor.	Chloride of Calcium. Chlorinated Lime.
Chlor.	Chlorine. Chloroform. Chloral.
Emp. Lyt.	Emplastrum Lytharg. (lead plaster). Emplastrum Lyttæ. (blistering plaster).
Ext. Col.	Extractum Colchici. Extractum Colocynthidis.
Hyd. Chlor.	Calomel. Corrosive Sublimate. Chloral Hydrate.

Hydr.	Hydrargyrum (mercury). Hydras (hydrate). Hydrochloras (hydrochlorate). Hydrocyanas (hydrocyanate). Hydriodas (hydriodate).
Mist. Ammon.	Ammonia Mixture. Mixture of Ammoniac.
Potass. Hyd.	Hydrate of Potash (caustic potassa). Hydriodate of Potash (iodide of potassium).
Sod. Sulph.	Sodium Sulphate. Sodium Sulphite. Sodium Sulphide.
Sulph.	Sulphate. Sulphite. Sulphide.
Zinci. Phosph.	Zinc Phosphate. Zinc Phosphide.

LIST OF ARTICLES ADDED TO THE PHARMACOPŒIA.

Acetanilidum.
Acidum Hypophosphorosum Dilutum.
" Stearicum.
Adeps Lanæ Hydrosus.
Alcohol Absolutum.
" Deodoratum.
Aloe Barbadensis.
Aloinum.
Aqua Aurantii Florum (diluted).
" Chloroformi.
" Hydrogenii Dioxidi.
" Rosæ (diluted).
Aspidosperma.
Barii Dioxidum.
Caffeina Citrata.
Caffeina Citrata Effervescens.
Calcii Sulphas Exsiccatus.
Cinnamomum Saigonicum.
Cocainæ Hydrochloras.
Convallaria.
Elastica.
Elixir Aromaticum.
" Phosphori.
Eriodictyon.
Eucalyptol.
Extractum Apocyni Fluidum.
" Asclepiadis Fluidum.
" Aspidospermatis Fluidum.
" Cimicifugæ.
" Convallariæ Fluidum.
" Eriodictyi Fluidum.
" Jalapæ.
" Lappæ Fluidum.
" Menispermi Fluidum.
" Phytolaccæ Radicis Fluidum.
" Rhamni Purshianæ Fluidum.
" Scoparii Fluidum.
" Uvæ Ursi.
" Viburni Opuli Fluidum.
Ferri et Quininæ Citras Solubilis.
Glyceritum Acidi Carbolici.

Glycerit·m Acidi Tannici.
" Boroglycerini.
" Hydrastis.
Hydrastininæ Hydrochloras.
Hyoscinæ Hydrobromas.
Hyoscyaminæ Hydrobromas.
Lithii Citras Effervescens.
Menthol.
Methyl Salicylas.
Naphtalinum.
Naphtol.
Oleatum Zinci.
Oleum Betulæ Volatile.
" Cadinum.
" Terebinthinæ Rectificatum.
Pancreatinum.
Paraldehydum.
Pepsinum.
Petrolatum Liquidum.
" Spissum.
Physostigminæ Sulphas.
Pilulæ Cartharticæ Vegetabiles.
" Ferri Carbonatis.
Potassii Citras Effervescens.
Pyrogallol.
Resorcinum.
Rhamnus Purshiana.
Salol.
Sodii Nitris.
Sparteinæ Sulphas.
Spiritus Amygdalæ Amaræ.
" Aurantii Compositus.
" Glonoini.
" Phosphori.
Strontii Bromidum.
" Iodidum.
" Lactas.
Strophanthus.
Suppositoria Glycerini.
Terebenum
Terpini Hydras.
Tinctura Lactucarii.
" Quillajæ.
" Strophanthi.
Trochisci Santonini.
Viburnum Opulus.
Zea.

LIST OF ARTICLES DISMISSED FROM THE PHARMACOPŒIA.

Abstractum Aconiti.
" Belladonnæ.
" Conii.
" Digitalis.
" Hyoscyami.
" Ignatiæ.
" Jalapæ.
" Nucis Vomicæ.
" Podophylli.
" Senegæ.
" Valerianæ.
Acetum Lobeliæ.
" Sanguinariæ.
Æther.
Ammonii Phosphas.
" Sulphas.
Amylum Iodatum.
Aurantii Flores.
Azedarach.
Cannabis Americana.
Ceratum Extracti Cantharidis.
" Sabinæ.
Charta Cantharidis.
Chinoidium.
Chloroformum Venale.
Cinchona Flava.
Cornus.
Cupri Acetas.
Cydonium.
Elixir Aurantii.
Emplastrum Ammoniaci.
" Asafœtidæ.
" Galbani.
" Picis Canadensis.
Extractum Cornus Fluidum.
" Lactucarii Fluidum.
" Malti.
" Mezerei.
Fel Bovis Inspissatum.
Ferri Oxalas.
Galbanum.
Gaultheria.
Gutta-Percha.
Hydrargyri Sulphidum Rubrum.
Ignatia.
Infusum Brayeræ.
Juniperus.
Lavandula.
Linimentum Cantharidis.
" Plumbi Subacetatis.

Liquor Ferri et Quininæ Citratis.
" Gutta-Perchæ.
" Pepsini.
Magnesii Sulphis.
Magnolia.
Maltum.
Mistura Magnesiæ et Asafœtidæ.
" Potassii Citratis.
Mucilago Cydonii.
Oleum Lavandulæ.
" Rutæ.
" Succini.
" Valerianæ.
Origanum.
Pilulæ Ferri Compositæ.
Pilulæ Galbani Compositæ.
Pix Canadensis.
Potassii Sulphis.
" Tartras.
Prinos.
Rosmarinus.
Salix.
Sodii Bicarbonas Venalis.
" Santoninas.
Spiritus Odoratus.
Syrupus Ferri Bromidi.
" Limonis.
Thuja.
Tinctura Conii.
" Ferri Acetatis.
" Ignatiæ.
Trochisci Magnesiæ.
" Sodii Santoninatis.
Unguentum Acidi Gallici.
" Mezerei.
" Sulphuris Alkalinum.
Ustilago.
Vinum Album Fortius.
" Aloes.
" Aromaticum.
" Rhei.
Viola Tricolor.

LIST OF CHANGES OF OFFICIAL LATIN TITLES.

Pharmacopœia 1880.	Pharmacopœia 1890.
Acidum Arseniosum.....	Acidum Arsenosum.
Æther Fortior.....	Æther.
Aloe	Aloe Socotrina.
Aluminii Hydras.....	Alumini Hydras.
" Sulphas.....	" Sulphas.
Aqua Aurantii Florum	Aqua Aurantii Florum Fortior.
" Creasoti.....	" Creosoti.
" Rosæ	" Rosæ Fortior.
Arsenii Iodidum.....	Arseni Iodidum.
Brayera.....	Cusso.
Carbonei Bisulphidum.....	Carbonei Disulphidum.
Chloroformum Purificatum...	Chloroformum.
Cinnamomum	Cinnamomum Cassia.
"	" Zeylanicum.
Collodium cum Cantharide...	Collodium Cantharidatum.
Creasotum	Creosotum.
Emplastrum Picis cum Cantharide, etc.	Emplastrum Picis Cantharidatum.
Erythroxylon.....	Coca.
Extractum Aloes Aquosum...	Extractum Aloes.
" Belladonnæ Alcoholicum, etc.	" Belladonnæ Foliorum Alcoholicum.
" Belladonnæ Fluidum.....	" Belladonnæ Radicis Fluidum.

Pharmacopœia 1880.	Pharmacopœia 1890.
Extractum Brayeræ Fluidum.	Extractum Cusso Fluidum.
" Conii Alcoholicum	" Conii.
" Erythroxyli Fluidum.....	" Cocæ Fluidum.
" Hyoscyami Alcoholicum.....	" Hyoscyami.
" Sarsaparillæ Compositum Fluidum	" Sarsaparillæ Fluidum Compositum.
" Stramonii.....	" Stramonii Seminis.
" Stramonii Fluidum	" Stramonii Seminis Fluidum.
" Viburni Fluidum..	" Viburni Prunifolii Fluidum.
Ferri Phosphas.....	Ferri Phosphas Solubilis.
" Pyrophosphas.....	" Pyrophosphas Solubilis.
" Sulphas Præcipitatus...	" Sulphas Granulatus.
Gossypium.....	Gossypium Purificatum.
Hydrargyri Iodidum Viride..	Hydrargyri Iodidum Flavum
Liquor Acidi Arseniosi.....	Liquor Acidi Arsenosi.
" Arsenii et Hydrargyri Iodidi.....	" Arseni et Hydrargyri Iodidi.
" Sodii Arseniatis.....	" Sodii Arsenatis.
Magnesii Citras Granulatus...	Magnesii Citras Effervescens.
Mangani Oxidum Nigrum....	Mangani Dioxidum.
Mistura Ammoniaci.....	Emulsum Ammoniaci.
" Amygdalæ.....	" Amygdalæ.
" Asafœtidæ.....	" Asafœtidæ.
" Chloroformi.....	" Chloroformi.
" Ferri et Ammonii Acetatis.....	Liquor Ferri et Ammonii Acetatis.
Oleum Bergamii..... .	Oleum Bergamottæ.
" Theobromæ.....	" Theobromatis.
Opium Denarcotisatum.....	Opium Deodoratum.
Petrolatum (in part).....	Petrolatum Molle.

Pharmacopœia 1880.	Pharmacopœia 1890.
Phytolaccæ Bacca.....	Phytolaccæ Fructus.
Quillaia.....	Quillaja.
Sapo Viridis.....	Sapo Mollis.
Sodii Arsenias	Sodii Arsenas.
Tinctura Belladonnæ.....	Tinctura Belladonnæ Foliorum.
" Colchici.....	" Colchici Seminis.
" Opii Deodorata.....	" Opii Deodorati.
" Saponis Viridis.....	Linimentum Saponis Mollis.
" Stramonii.....	Tinctura Stramonii Seminis.
Viburnum.....	Viburnum Prunifolium.

TABLE SHOWING THE STRENGTH OF THE MORE IMPORTANT PHARMACOPŒIAL PREPARATIONS IN THE PRESENT AND IN THE PRECEDING PHARMACOPŒIA.

NOTE.—The less important articles or preparations (Cerates, Ointments, Pills, Spirits, Syrups, Troches, etc.) are not noticed here. Of tinctures, only the more energetic ones are included. In the case of all other preparations intended for internal use, the strength directed by the present Pharmacopœia is practically the same as that directed by the preceding one.

Title of Article.	Chief Constituent.	Pharm. 1880.	Pharm. 1890.
Acetum Opii	Opium of 13 to 15 % Morphine (cryst.)	1 Gm. in ab. 9 Cc.	1 Gm. in 10 Cc.
Acidum Nitricum	HNO_3, by weight	69.4 %	68.0 %
" Phosphoricum	H_3PO_4, " "	50.0 %	at least 85.0 %
" Sulphuricum	H_2SO_4, " "	at least 96.0 %	at least 92.5 %
" Sulphurosum	SO_2, " "	about 3.4 %	at least 6.4 %
Alcohol Dilutum	Absolute Alcohol, by weight	45.5 %	about 41.0 %
Calx Chlorata	Available Chlorine, by weight	at least 25.0 %	at least 35.0 %
" Sulphurata	CaS, by weight	at least 36.0 %	at least 60.0 %
Decocta	Drug	about 1 in 10	about 1 in 20
Extractum Nucis Vomicæ	Alkaloids, by weight	strength not fixed	15.0 %
Extr. Nucis Vomicæ Fluid.	" " "	" " "	1.5 Gm. in 100 Cc.
Extractum Opii	Morphine (cryst.), by weight	" " "	18.0 %
Infusa	Drug	about 1 in 10	about 1 in 20
Liquor Sodæ Chloratæ	Available Chlorine, by weight	at least 2 %	at least 2.6 %
Opii Pulvis	Morphine (cryst.), " "	12 to 16 %	13 to 15 %

Opium (moist)	Morphine (cryst.), by weight	at least 9%	at least 9%
Pepsinum	Digestive Power on Albumen	.....	at least 1 to 3000
" Saccharatum	" " " "	1 to 50	at least 1 to 300
Tinctura Aconiti	Aconite	1 Gm. in ab. 2.89 Cc.	1 Gm. in 2.86 Cc.
Tinc. Belladonnæ Foliorum	Belladonna Leaves	1 " " " 7.0 "	1 " " 6.67 "
Tinctura Cannabis Indicæ	Cannabis Indica	1 " " " 6.0 "	1 " " 6.67 "
" Colchici Seminis	Colchicum Seed	1 " " " 7.0 "	1 " " 6.67 "
" Cubebæ	Cubeb	1 " " " 11.1 "	1 " " 5.0 "
" Digitalis	Digitalis	1 " " " 7.0 "	1 " " 6.67 "
" Gelsemii	Gelsemium	1 " " " 7.8 "	1 " " 6.67 "
" Hyoscyami	Hyoscyamus	1 " " " 7.0 "	1 " " 6.67 "
" Iodi	Iodine	1 " " " 14.2 "	1 " " 14 3 "
" Lobeliæ	Lobelia	1 " " " 5.3 "	1 " " 5.0 "
" Moschi	Musk	1 " " " 10.8 "	1 " " 20.0 "
" Nucis Vomicæ	Alkaloids	2% of dry extract	0.3% of alkaloids
" Opii	Opium of 13 to 15% Morphine (cryst.)	1 Gm. in ab. 10.4 Cc.	1 Gm. in 10.0 Cc.
" " Camphorata	" " " " "	1 " " " 257.0 "	1 " " 250.0 "
" " Deodorati	" " " " "	1 " " " 10.6 "	1 " " 10.0 "
" Physostigmatis	Physostigma	1 " " " 12.15 "	1 " " 6.67 "
" Stramonii Seminis	Stramonium Seed	1 " " " 11.1 "	1 " " 6.67 "
" Veratri Viridis	Veratrum Viride	1 " " " 2.2 "	1 " " 2.5 "
Vinum Colchici Radicis	Colchicum Root	1 " " " 2.46 "	1 " " 2.5 "
" " Seminis	" Seed	1 " " " 6.65 "	1 " " 6.67 "
" Ipecacuanhæ	Ipecac	1 " " " 12.8 "	1 " " 10.0 "
" Opii	Opium of 13 to 15% Morphine (cryst.)	1 " " " 10.0 "	1 " " 10.0 "

NOTE.—Acetum Opii, Tinctura Opii, Tinctura Opii Deodorati, and Vinum Opii are required to yield, on being assayed, 1.3 to 1.5% of crystallized morphine.

LIST OF THE NEWER UNOFFICIAL DRUGS.

This list is compiled from articles by Dr. R. G. Eccles, Prof. W. A Viall, Dr. W. A. N. Dorland, and others, and also from numerous medical journals.

Acetal.—(Ethylidine Diethylic Ether), CH_3, CH, $(OC_2H_5)_2$. This is a limpid liquid soluble in 18 parts of water and in alcohol in all proportions. It is used as a narcotic. Its dose varies from 1½ to 2½ drams.

Acetophenone.—Vide Hypnone.

Acetyl-Amidophenol.—$C_{18}H_9NO_4$. A white, amorphous powder, soluble in alcohol and concentrated acetic acid, but slightly and slowly soluble in water. Used as an antithermic in doses of 3 to 8 grains.

Acid, Agaric.—From Agaricus Albus. A white, silky, crystalline substance, scarcely soluble in cold, but readily soluble in hot water. Used for checking night sweats in consumptives. Dose ¼ of a grain.

Acid, Anisic.—(Methyl Ether of Para-oxy-benzoic Acid), C_6H_4 (OCH_3) COOH. White or colorless crystals, insoluble in water, but soluble in alcohol. It is used to subdue bacteria and reduce fever.

Acid, Camphoric.—An oxidation product of camphor. Colorless crystals, almost insoluble in water, but quite soluble in alcohol and ether. It is used to check night sweats and as an antiseptic gargle or spray in 2- or 3-per-cent. solution. The dose is 15 to 30 grains.

Acid, Cetrartic.—(Cetrarine), $C_{18}H_{16}O_8$. The bitter principle of Iceland moss, occurring in white crystalline needles, almost insoluble in cold, but soluble in boiling water. Used in augmenting the secretions of the pancreas, salivary glands, etc.

Acid, Di-iodo-Salicylic.—OH, $C_6H_2I_2$, CO_2H. A white powder, scarcely soluble in water or glycerine, but soluble in alcohol and ether. It is used to relieve pain and reduce fever, in doses ranging from a scruple to a dram.

Acid, Orthophenol-Sulphonic.—Vide Aseptol.

Acids, Oxynaphthoic (A and B).—They are white, bitter, odorless powders. A 10-per-cent. ointment is said to be an effectual cure for the itch. Their antiseptic power is great, and their salts are pronounced good antipyretics or fever reducers.

Acid, Phenylhydrazin Levulinic.—Vide Antithermine.

Acid, Phenyl Propionic. — A reddish-white crystalline powder, insoluble in water, soluble in 6 parts alcohol, having a slightly acidulous taste and aromatic taste and odor. It is used to improve the appetite of consumptives in doses of 2 to 4 grains.

Acid, Sulpholeinic.—Vide Polysolve.

Acid, Trichloracetic.—CCl_3 COOH. A colorless, transparent crystalline substance, deliquescent and strongly caustic, with a slight odor. It is soluble in water and alcohol, and is used for cauterizing purposes in throat and nose diseases, also as a hemostatic.

Adhatoda Vasica.—(Indian Walnut.) Expectorant, antispasmodic, and aromatic. Dose, fluid extract, 5 to 10 minims.

Adonidin.—A glucoside from Adonis Vernalis. A light yellow amorphous powder, used in heart and kidney diseases as preferable to digitalis, in single doses of $\frac{1}{12}$ to $\frac{1}{6}$ of a grain per day.

Agaricin.—An active principle from agaric, that crystallizes in long transparent needles, and is used in doses of $\frac{1}{12}$ to $\frac{1}{8}$ of a grain, given in pill form five or six hours before bedtime, for night sweats.

Alaninate of Mercury.—$C_6H_7NO_4$. (Amido-propionate of Mercury.) A white crystalline powder, forming colorless solutions in three times its weight of water. Said to cure bad cases of specific disease in four to six weeks in doses of $\frac{1}{12}$ to $\frac{1}{4}$ grain per day, given hypodermically.

Allyl Tribromide.—This is a clear liquid, and is used in whooping cough, hysteria, and asthma in five-drop-doses.

Alstonia Constricta.—Tonic, astringent, anthelmintic, and antiperiodic. Dose 5 to 10 minims, fluid extract.

Alstonia Scholaris.—(Dita Bark.) Tonic, anthelmintic, and febrifuge. Combines the properties of quinine and strychnine. Dose 2 to 8 minims, fluid extract.

Aluminium Acetico-Tartaricum.—This comes in transparent, faintly yellowish, crystalline granules, that are soluble in water, but insoluble in glycerine, alcohol, or ether. It is caustic, astringent, and antiseptic, and is said to surpass all other remedies in the treatment of some diseases of the nose. A 50-per-cent. solution is pronounced a good wash for chilblains.

Alumnol.—A new antiseptic, appearing in the form of a white, readily soluble powder. It easily permeates the tissues, and favorable results have been obtained from its use in surgery, gynecology, dermatology, and otology. Almost a specific in the treatment of blennorrhagic endometritis. Employed in solutions varying in strength from 1 to 50 per cent.

Alveloz.—The milky exudation of Euphorbia hetrodoxa Mueller, a native plant of Brazil. It looks like soft lard or lanolin. Grave cases of lupus, cancer, and

other tumors have been reported cured by its use. It is a powerful escharotic, and is generally used externally.

Amylene Hydrate.—$C_5H_{11}OH$. A clear liquid with an unpleasant taste and odor. Fully soluble in glycerine and alcohol, or in 8 parts of water. One fluid dram produces sleep that lasts from six to eight hours. Its friends claim it to be superior to paraldehyde.

Anagyrine.—$C_{14}H_{18}N_2O_2$. An alkaloid from Anagyrus fœtida. An amorphous, yellowish powder, soluble in water, alcohol, and ether. Very deliquescent. Poisonous in large doses and cathartic in very small ones.

Anemonin.—$C_{15}H_{12}O_6$. The active principle of Anemone pulsatilla. It forms long crystalline needles that are soluble in water, alcohol, or ether. Given in doses of ½ grain in paralysis, and smaller doses for whooping-cough.

Anhalonium Lewinii.—(Muscale Buttons.) Respiratory stimulant, Cardiac stimulant and tonic. Dose, fluid extract, 1 drop.

Annidalin.—Vide Aristol.

Anthrarobin.—A yellowish-white powder, insoluble in water, but soluble in dilute alkaline solutions. A good antiseptic, and used by dermatologists in place of chrysarobin or chrysophanic acid for skin diseases.

Antikamnia.—It is said to be a white powder, slightly soluble in water, more freely in alcohol, and acting as a pain reliever and fever reducer in doses ranging from 3 to 10 grains.

Antipyrine.—(Phenyl-dimethyl-pyrayolon.) $(C_6H_5)(CH_3)_2C_3HN_2O$. A white crystalline powder, very soluble in water, less so in alcohol and in 4 parts of glycerine. The process of making it is patented by Knorr. Has won popularity by virtue of the power of relieving pain, reducing fever, checking rheumatism, and arresting

hemorrhage when locally applied. Dose, 5 to 20 grains.

The following substances have been declared incompatible with Antipyrine:

Carbolic Acid,	Glycerite of Tannin,
Hydrocyanic Acid,	Corrosive Sublimate,
Nitric Acid,	Calomel,
Tannic Acid,	Donovan's Solution,
Ammonia Alum,	Permanganate of Potash,
Nitrite of Amyl,	Nitrous Acid,
Iodide of Arsenic,	Sweet Spirits of Nitre,
Chloral Hydrate,	Syrup Iodide of Iron,
Sulphate of Copper,	Tincture of Catechu,
Decoction of Cinchona,	" " Cinchona,
Nitrites,	" " Iron,
Fluid Extract of Cinchona,	" " Hammamelis,
Iron Sulphate,	" " Iodine,
" Chloride,	" " Kino,
" Persulphate,	" " Rhubarb.

Antisepsin.—$C_6H_4BrNHC_2H_3O$. Bromated antifebrine. An antipyretic and analgesic, closely resembling antifebrin in its action. In large doses it will produce an evanescent cyanosis and death by paralysis of respiration. It is best given in 1-grain doses four times daily. Locally it may be used in powder form as an application to wounds and ulcers.

Antithermine.—(Phenylhydrazine-levulinic Acid.) C_6H_5, N_2H (CH_3), C, $(CH_2)_2$ COOH. Yellow prismatic crystals. Said to be a powerful antipyretic in smaller doses than other drugs of the same character.

Arbutin.—$C_{25}H_{34}O_{14}$. A glucoside derived from Archtostaphylos uva ursi, Spreng. A white powder, soluble in water and alcohol, and is said to cure vesical catarrh if given in daily doses of 15 to 40 grains.

Arecolin.—An alkaloid from Areca nuts, used as a worm-medicine.

Aristol.*—A union of iodine and thymol, insoluble in water or glycerine, soluble in fatty oils and ether, and slightly soluble in alcohol. As an antiseptic and parasiticide it is said to be excellent. For skin diseases 10% in alcohol is said to work well.

Asclepias Curassavica.—(Blood Flower.) A powerful hæmostatic and vermifuge. Dose, 1 to 2 drams, fluid extract.

Aseptol.—$C_6H_4OHSO_3OH$—is prepared by the direct combination of carbolic acid and concentrated sulphuric acid, and is an antiseptic somewhat weaker than carbolic acid. It may be used internally in the form of a lemonade in the treatment of pharyngitis and diphtheritic laryngitis. Externally it is usually employed in a 1- to 10-per cent. solution.

Benzanilid.—C_6H_5, NH, C_7H_5O. A white crystalline powder with slight pinkish tinge, insoluble in water, slightly soluble in ether, and soluble in 58 parts of alcohol. It is put forward as superior to acetanilide as an antipyretic because it produces no gastric disturbances. The dose varies from 1 to 10 grains, according to age and use.

Benzoate of Bismuth.—Benzoate of bismuth has been used by Finger in the local treatment of soft chancre with great success. In each case the surface of the sore was thoroughly washed, and a thin layer of the benzoate applied by means of a soft brush. After this the spot was entirely covered with cotton, which was held in place by an adhesive strip or bandage. The strips should be changed once or twice in twenty-four hours. While at first they may produce slight burning and pricking, no discomfort ensues. The surface of the ulcer rapidly becomes healthy, and the discharge of pus

* The percentage of Iodine in the following drugs is: Iodoform, 96.7%; Iodol, 88.9%; Aristol, 45.8%; Europhen, 27.6%.

is checked after the third or fourth day, and cicatrization takes place.

Benzoate of Naphthol-Beta.—$C_{10}H_7O(C_7H_5O)$. A valuable intestinal antiseptic, is prepared by combining benzoic acid with naphthol-beta. It is possessed of but slight toxicity, and its properties as an antiseptic for the intestinal tract are compared favorably with those of any other substance in use for this purpose. The benzoic acid which it contains is eliminated by the urine in the form of the alkaline hippurates; hence diuresis is favored, and urinary toxicity markedly decreased. It may be administered in daily doses of 75 grains to an adult, or 30 grains to a child.

Benzosol.—$(O.COC_6H_5)\ C_6H_4\ (O.CH_3)$, Benzoyl-Guaiacol. Has been proven an antituberculotic remedy of considerable power, as well as an antipyretic and antiseptic, in doses of from 4 to 10 grains in powder form. A beneficial influence is exerted upon the general nutrition, and in this way the resisting powers of the individual greatly increased.

Brom-Acetanilid.—Vide Antisepsin.

Bromamid.—$C_6H_2Br_3NH.HBr$. Is a bromine compound of the anilide group, with strongly marked antipyretic and antineuralgic properties. It is readily borne by the stomach, and does not give rise to excessive sweating. Its diuretic action is not pronounced. The dose varies from 10 to 15 grains several times in the day.

Bromelin.—Concentrated pineapple juice. A thick syrupy liquid. Recommended as a substitute for pepsin in dissolving diphtheritic membranes.

Bromoform.—$CHCl_3$. A clear liquid, slightly soluble in water, but freely soluble in alcohol. It has lately been used for the cure of whooping-cough in 1- to 5-drop doses diluted and taken three times a day.

Cascara Amorga.—(Honduras Bark.) An undetermined

species of Picramnia. A tonic and alterative in specific diseases. Dose 40 to 50 drops, fluid extract.

Cetraric Acid.—An antichloritic and peristaltic stimulant, said to have the power of increasing the number of blood-corpuscles, especially the red, in very pale people. Dose 1½ to 3 grains.

Chinoline.—C_9H_7N. (Quinoline.) An alkaloid that can be made from both quinine and anilin. It is a transparent, oily liquid, having a characteristic odor, and soluble in alcohol, but insoluble in water. A 1-per-cent. solution will dissolve blood clots. It is antipyretic and antineuralgic in doses of 5 to 10 grains.

Chloral-Amide.—(Formidate of Chloral.) Colorless, bitter crystals, soluble in 3 parts of glycerine, 1½ parts of alcohol, and 19 parts of water. Given in doses ranging from 25 to 75 grains to produce sleep and check the night sweats of consumptives. Fifteen-grain doses three times a day are said to have cured chorea in children. It is said to be useless in insomnia due to pain. Average dose as a simple soporific, gr. xxv–xxx. If swallowed quickly this powder is nearly tasteless. Wash down with water.

Chloral-Imide.—Long colorless, tasteless needles, slightly soluble in water, more soluble in alcohol, and most soluble in ether. It is given in doses of from 4 to 8 grains to reduce fever and arrest pain.

Chlorphenol.—$C_6H_4Cl.OH$. Is highly recommended by the Italian physicians as an inhalant in tuberculous affections in 6- to 12-drop doses. The symptoms ameliorate rapidly under its use.

Cinchonamine.—$C_{10}H_{24}N_2O$. An alkaloid from Remija Purdieana Wedd. It is a substitute for quinine in doses one fourth the size.

Cocaine Phenate.—An anticatarrhal remedy and antiseptic form of cocaine, having the same uses and dosage as the hydrochlorate.

Cocillana.—The bark of Sycocarpus Rusbyi, of the order Meliaceæ. A substitute for ipecac as an emetic and expectorant. Large doses act as a cathartic, while small ones promote the appetite. Dose, fluid extract, 5 to 25 minims.

Colchicine.—$C_{17}H_{23}NO_6$. The alkaloid of Colchicum seed. A bitter, yellowish-white powder, soluble in alcohol and chloroform. It is said to be a specific for gout in doses of $\frac{1}{128}$ of a grain administered hypodermically.

Copernica cerifera Martius.—(Carnauba Root.) An alterative and diuretic, used as a substitute for Sarsaparilla. Dose, fluid extract, 1 dram to 1 ounce.

Coronilla.—From Coronilla Scorpioides, an annual plant of southern France. Contains a glucoside that has been named Coronillin. Dose, tincture, 15 to 30 minims, used as a cardiac stimulant and diuretic.

Creolin.—A complex body containing Naphthalin, Cresylol, Xylenol, Phlorol, Leucolin, Anthracine, Pyridine, etc., etc. It is procured from coal-tar creosote, is soluble in alcohol and emulsifies with water. It is claimed to be less poisonous and more active as a bacteriacide than phenol. As an antiseptic douche, 1 %, or less, mixed with water.

Cresalol.—(Salicylate of Cresol.) A white crystalline substance, insoluble in water, slightly soluble in alcohol. It has a pleasant odor, is tasteless, and is administered in doses of 4 to 6 grains as a substitute for salol, to which it is said to be superior. Antiseptic and antirheumatic.

Cresol.—(Cresylic Acid.) C_6H_4 (CH_3) OH. A liquid slightly soluble in water. Found with carbolic acid in coal-tar. It is said to be a powerful antiseptic and good hemostatic used in 2 % solution.

Cyperus Articulatus, Lin.—(Adrue.) A tropical rush used

as an antidyspeptic and anti-emetic. Especially valuable in yellow-fever and whooping-cough. Dose of fluid extract, 20 to 30 drops in water every fifteen minutes.

Dermatol.—$C_6H_2(OH)_3$, $CO_3Bi(OH)_2$, bismuth subgallate—is an antiseptic powder of considerable value. It does not give rise to irritation and is not absorbed. It has been largely employed in surgery, dermatology, and gynecology, but is not as serviceable in local tuberculous affections as iodoform. It has been employed in 2-dram doses daily in affections of the stomach and intestines.

Dichroe Febrifuga.—A plant of the order Saxifragaceæ, the bark of the root of which has been introduced as an antipyretic.

Disinfectol.—An antiseptic substance analogous to creolin and lysol, used in the form of a 2 to 5 % emulsion.

Diuretin.—The sodio-salicylate of theobromine, and should be ordered, to save expense, under this name. Strongly recommended by Dr. E. L. Keyes. Dose, 5 to 10 grains every few hours to 90 to 120 grains daily.

Dulcin.—From phenitiolin and urea. Is a derivative of benzol, like saccharin, and is harmless. It is 200 to 250 times sweeter than cane sugar.

Echschlotzia Californica Chamisso.—(California Poppy.) A quieting analgesic and soporific adapted to children. Dose, fluid extract, ½ to 2 drams a day.

Echujin.—A poisonous glucoside from Adenium Boehemianum. It has been used as a substitute for digitalis and strophanthine in heart disease.

Elephantopus Tomentosus, Lin.—(Elephant's Foot.) This plant is a native of the southeastern States, and is recommended as a good diaphoretic and expectorant in doses of 5 to 30 minims of the fluid extract. Large doses produce emesis.

Embellia Ribes.—Carminative, tonic, and antidyspeptic. The seed is the part most used, but the fruit is a good anthelmintic.

Ephedra Antisyphilitica.—(Brigham-weed.) Of use in venereal diseases. Native of the Rocky Mountains. Dose, 1 or 2 drams.

Ephedrine.—From Ephedra vulgaris, a plant, natural order Solanaceæ. It is an alkaloid whose hydrochlorate is found in circular crystals, freely soluble in water, slightly soluble in alcohol, and insoluble in ether. It is claimed to be a successful rival of atropia as a mydriatic.

Erythrophlæin.—A toxic alkaloid, introduced as a rival of cocaine for producing local anæsthesia. Dose, for internal use, $\frac{1}{12}$ to $\frac{1}{6}$ of a grain.

Ethoxy-Caffein.—A white powder, slightly soluble in alcohol and readily soluble in water. It is used as a cerebro-spinal sedative to cure migraine and check neuralgia, in doses of $1\frac{1}{2}$ to 4 grains, with cocaine hydrochlorate to keep it from acting as an emetic.

Ethyl Bromide.—A volatile liquid used for the rapid production of anæsthesia, that is said to produce no disagreeable after-effects. The quantity required is from $1\frac{1}{2}$ to 6 drams.

Ethylene Bromide.—$C_2H_4Br_2$. Is recommended as a substitute for the bromides in the treatment of epilepsy. May be administered in doses varying from $\frac{3}{4}$ to $2\frac{1}{4}$ minims three times a day, either in milk or in the form of an emulsion. An oily solution may be used subcutaneously.

Eucalyptol.—A colorless liquid of pungent taste and pleasant odor, soluble in alcohol but scarcely so in water. It is from the Eucalyptus tree, and is recommended as a powerful antiseptic and antipyretic.

Eugenia Chequen.—(Chekan.) Introduced from Chili as a

useful remedy in chronic bronchial catarrh and in winter coughs among old people. Dose, 1 to 3 drams.

Eugenol.—$C_{10}H_{12}O_2$. (Eugenic Acid.) Prepared from oil of cloves, which it resembles in appearance, taste, and odor. It is soluble in ether and alcohol, and is used as an anæsthetic, antithermic, and antiseptic. The dose is 4 to 15 minims.

Euphorin.—$C_9H_{11}O_2$. (Phenyl-Ethylic-Urethane.) A white powder with a taste resembling cloves. It is prepared from anilin. In doses of 1½ to 10 grains it is said to relieve rheumatism and act as an antipyretic. It is claimed to rapidly heal ulcers by external application.

Euphrasia officinalis, L.—This plant, of the order Scrophulariaceæ, was, during the prevalence of the old doctrine of signatures, used for eye diseases. It is now found to be useful in coryza and for aborting colds. The dose of the tincture is 6 to 8 drops.

Exalgin.—Methylacetanilide. A white, crystalline powder, soluble in 6 parts of water and 34 parts of glycerine and less than an equal weight of alcohol. Antiseptic, antipyretic, and analgesic. Resembles antifebrin, but has been found more valuable in painful affections than the latter drug. Dose 2 to 8 grains, generally given in a mixture with alcohol, syrup, or water. Very large doses produce darkening of the blood and cause the formation of methæmoglobin. To be used with caution.

Exodyne.—An anodyne composed of a mixture of 90 parts of acetanilid, 5 of salicylate of sodium, and 5 of bicarbonate of sodium. Employed in the same class of affections as acetanilid.

Fluorescein.—A red powder, freely soluble in water. It is used as an aid to diagnosis in diseases of the eye. Unhealthy parts are stained by it, while the healthy is in no way affected. Foreign bodies in the eye, however small, are shown by a color-ring which it produces.

Formyl-Amido-Phenol-Ether.—A substance used to check tetanus and possessing slight antipyretic qualities.

Fuchsin.—$C_{20}H_{10}N_3$, HCl. (Aniline Red.) An antimycotic when exhibited in ½- to 4-grain doses. Has been used in chronic tuberculous affections of the larynx and pharynx.

Gallacetophenone.—CH_3CO, C_6H_2 $(OH)_3$. Used in dermatology as an efficient antimycotic in the form of a 10-per-cent. ointment.

Garrya Fremontii.—(California Fever Bush.) An antiperiodic and antipyretic, used as a substitute for cinchona in doses of 10 to 30 minims of the fluid extract.

Glycozone.—A liquid stable compound resulting from treating glycerine with fifteen times its own volume of ozone. Is harmless, and an excellent gastric and intestinal antiseptic and antifermentative. Dose a dram to half an ounce or more.

Gouania Domingensis.—(Jamaica Chewstick.) A climbing shrub of the West Indies, used to facilitate digestion and as a tonic in dyspepsia and consumption. Dose, fluid extract, 1 to 2 drams.

Guafine.—A resin from the leaves of Psidium pyriferum, a South American tree of the order Myrtaceæ. It is recommended as a powerful antipyretic and an aid to digestion.

Guaiacol.—C_6H_4OH, OCH_3. Is much used as a substitute for creasote in pulmonary tuberculosis, administered with cod-liver oil. Schneller administers it frequently by inhalation, employing for this purpose weak aqueous solutions (5:3000 to 5000). It may be injected in aqueous solution, in combination with a 10-per-cent iodoform-glycerine solution, into tuberculous glands and joints. Also an antipyretic in doses of ½ to 2 minims in pill or capsule.

Guaiacol-Benzoyl.—$C_{14}H_{12}O_3$. An odorless, insipid, white powder, insoluble in water, but soluble in ether, alcohol, and chloroform. Walzer advocates its use as a cure for consumption in doses of 4 grains gradually increased.

Guaiacol-Salol.—$C_9H_{12}O_4$. A white powder, insoluble in water, but soluble in alcohol. Like salol, it does not break up until reaching the intestines, where it acts as a powerful disinfectant and antirheumatic. Dose 3 or 4 grains.

Gyroscardia Odorata.—A plant of the order Bixaceæ, the bark of which is being introduced as an antipyretic.

Hæmogallol.—A reduction—product of Hæmatin. Reddish-brown powder. A very absorbable hæmatinic, for chlorosis, anæmia, etc. Dose 5 to 15 grains or more.

Helianthella Tumifolia.—A Florida plant resembling a sunflower, possessing aromatic, expectorant, antispasmodic, diuretic, and diaphoretic properties in doses of 5 to 30 minims of fluid extract. Large doses are emetic.

Histerionica Baylahuen.—A plant from Chili used as an astringent and antiseptic. Tincture is given in doses of 15 to 35 drops.

Hollarhena.—A tincture of the seeds given in doses of 15 to 60 minims. It is said to equal quinine as an antiperiodic, and is likewise useful to check dysentery and destroy intestinal worms.

Hydracetin.—(Acetyl-Phenyl Hydrazin), known also as Pyrodine. C_6H_5, N_2H_2 (C_2H_3O). A white, crystalline powder, odorless and almost tasteless, soluble in alcohol, and slightly and slowly soluble in water. Is antiseptic and a powerful antipyretic, but must be administered with caution, as toxic effects are readily produced. It is a powerful blood-poison, with destructive action upon the red blood-corpuscles, analogous to that of potassium chloride. Dose ½ to 2 grains daily,

in one or two doses. A 10-per-cent. ointment is used in skin diseases.

Hydrogen Peroxide.—Official as Aqua Hydrogenii Dioxidi. See Barium Dioxide in the official list. Commonly contains free hydrochloric acid, in order to keep well. Neutralize with sodii bicarb., to avoid irritating local effects. Add the soda until blue litmus paper is no longer reddened. Is a harmless and most excellent disinfectant of suppurating surfaces. Also one of the best means of removing diphtheritic membrane. Bleaches hair and skin a blond color.

Hydroquinone.—(Paradioxybenzol), C_6H_4 $(OH)_2$. Colorless crystals, freely soluble in alcohol and ether and in 17 parts of water. An efficient antiseptic and a good reducer of fever in doses of from 10 grains to nearly 1 dram.

Hydroxylamine.—A white powder used in ointments and aqueous solutions of 1 to 10 per cent. for skin diseases. The hydrochlorate is used and is said to be a powerful antiseptic.

Hypnal.—(Trichlor-Aldehyde-Phenyl-Dimethyl-Pyrazol), (C_6H_5) $(CH_3)_2$ C_3HN_2O, CCl_3 CHO. This crystalline substance is produced when chloral-hydrate and antipyrine are mixed. It is said to be a good hypnotic when there is pain or coughing. Dose 15 grains.

Hypnone.—(Acetophenone), C_6H_5CO, CH_3. Is sold in large crystalline scales, having an odor resembling bitter almonds. Soluble in alcohol and ether, but not in water or glycerine, and is used as an hypnotic in doses of 7½ grains.

Ichthyol.—A mixture of sulphated hydrocarbons. Thiol varies but little from it. Used externally in rheumatism and inflammatory affections of the skin. Seventy-five grains can be taken a day in divided doses. For external use 20 per cent. in lanolin makes the best combi-

nation. Von Nussbaum has recommended it locally, diluted one half with vaseline, for erysipelas. It is about the consistence and color of dark molasses and has a very unpleasant odor.

Imperialine.—An alkaloid from Fritillaria imperialis, used as a heart depressant. $C_{35}H_{60}NO_4$. Insoluble in water, but soluble in hot alcohol.

Iodol. — (Tetra-Iodo-Pyrrol), C_4I_4NH. A yellowish or brownish-gray crystalline powder, having slight local anæsthetic properties. Insoluble in water, soluble in alcohol, ether, or chloroform. Tasteless, odorless, and contains about 90 per cent. of iodine. Like iodoform, it is a mild antiseptic and promotes granulations. Spoils in the light.

Iodophenin.—A most efficient bactericide, but objectionable because of its strong evolution of iodine and danger of iodine intoxication when administered internally.

Jacoranda Porocera.—(Caroba.) An alterative, diuretic, sudorific, and tonic. Used also in skin diseases. Dose 15 minims to 1 dram of fluid extract.

Jambol.—From an East Indian plant. Sygygenium Jambolanum. The active principle resides mostly in the seeds, next in the bark of root, next in the bark elsewhere. Contracts the arteries everywhere, causing considerable rise in the arterial pressure, especially that of the kidneys. Is heart and respiratory tonic, also increases peristalsis. In overdose, paralyzes all parts if formerly stimulated. Used in diabetes mellitus, also to some extent in gastritis, enteritis, peritonitis.

Jatropha Machorhiza.—A Mexican alterative, cholagogue, and cathartic. Dose ½ to 2 drams.

Kairin.—Like antipyrine is an alkaloid obtained synthetically from the Chinoline series. Professor Quinlan, of Dublin, calls it "a good and safe antipyretic." Erlanger recommends a sulphate of the alkaloid as being free

from marked untoward effects. Average dose 15 grains. The effect lasts but four hours. Sweating, some cardiac depression, itching of nose, dryness of throat; after several doses olive-green urine; rigor when temperature ascends again, if it has been brought down to normal.

Kefir.—A substance used in rendering milk more easily digested. It is prepared from a so-called "Kefir-fungi." The Kefir drink is of great use in convalescence, anæmia, emaciation, etc.

Lysol.—A saponified phenol with powerful antiseptic properties. It is claimed by some that it is superior to the disinfectants commonly in use, including carbolic acid and the bichloride of mercury. It has no toxic effects. A 1-per-cent. solution is a good general antiseptic. In 3-per-cent. solutions it has the properties of a soap and acts as an excellent disinfectant of the hands.

Mercur-Glutino-Peptonate.—A white, hygroscopic powder, soluble in water and alcohol in every proportion. It holds 25 per cent. of corrosive sublimate. Used hypodermically in doses of $\frac{1}{6}$ of a grain it is said to be an effective cure for specific contagion.

Mercur-Thymol-Acetate.—A white powder, insoluble in water. It is given hypodermically in purified petroleum oil in doses of 16 minims of a 3-to-40 preparation once a week. Consumption, complicated with specific disease, is said to progress favorably under it.

Methacetin.—(Para-Acet-Anisidin.) A slightly reddish, odorless powder, slightly soluble in cold water, more in hot water, and still more in alcohol. It is related to phenacetin and, like it, used to reduce fever in doses of 3 to 6 grains.

Methylal.—(Methylene Dimethilic Ether), $CH_2(OCH_3)_2$. A colorless liquid, having a chloroform-like odor with a warm, aromatic taste, soluble in 3 parts of water and in all proportions of chloroform, alcohol, or ether. It is

used as an antidote to strychnine and as a sleep producer.

Methyl Chloride.—CH_3Cl. A colorless, easily liquefiable gas, with an odor like ether. It is used as a spray for the production of local anæsthesia.

Methylene Chloride.—CH_2Cl_2. A colorless, volatile liquid, with an odor resembling that of chloroform, soluble in alcohol and ether, and used as an anæsthetic. It was tried some years ago and rejected because it could not be had pure. It is again being introduced, but of better quality and safer.

Methyl Fluoride.—A colorless liquid used as an anæsthetic.

Microcidin.—(Sodium Naphtholate.) An efficient antipyretic, and is placed by Berlioz among the best and most innocuous of antiseptics. Best used in a 3:1000 solution.

Mikania Guaco.—(Guaco.) Considered by the Mexicans as a specific in rheumatism. Dose, fluid extract, 15 to 30 minims.

Monordica Balsamina.—(Balsam Cucumber.) A climbing vine of the tropics, used to relieve pain and as an expectorant. Dose, fluid extract, 1 to 4 drams.

Moussena.—An anthelmintic from Acacia anthelmintica, natural order Leguminosæ. One to two ounces of the powdered drug is taken as infusion.

Murure Oil.—From Bichetea officinalis, a plant of Brazil, natural order Urticaceæ. Dose, ½ oz.; also applied externally to cure ulcers and rheumatism.

Musa Sapientum.—(Banana root.) Used as a cure for bronchocele in doses of 15 to 30 minims of fluid extract.

Naphthalin.—$C_{10}H_8$. Comes in colorless scaly crystals of a tarry odor, that are insoluble in cold water, slightly soluble in alcohol, and freely soluble in fixed oils. It is a powerful antiseptic, and is used for diarrhœas and intestinal troubles in doses of 10 to 15 grains. It has lately been introduced as a cheap substitute for camphor.

Naphthalol.—(B-Naphthyl Salicylate.) $C_6H_4(OH)COOC_{10}H_7$. White scales, nearly insoluble in water, easily soluble in hot alcohol, and without taste or odor. It is a substitute for salol, and given in the same doses.

Naphthols (A and B).—$C_{10}H_7$, OH. Colorless silky needles and grayish-white flakes. Soluble in alcohol and slightly in cold water. Used to check fermentation, as antiseptics, and in skin diseases.

Naregamia Alata.—Known as Genoese ipecac. A near relative of Cocillana. The bark contains an alkaloid. It is used in India as a cholagogue, but introduced to us as an expectorant, to be taken in doses of 15 to 50 drops daily. The bad taste is overcome by laurel water.

Œnothera Biennis.—(Evening primrose.) Said to be a good nervous sedative, relieving asthma, whooping-cough, and bronchial irritations in doses of 30 to 60 minims, fluid extract.

Oresin.—$C_{14}H_{12}N_2$, $HCl.2H_2O$. A light-colored powder of a slightly bitter and intense burning after-taste, slightly soluble in water and soluble in alcohol. Has the property of stimulating the gastric secretion, and thus of increasing the appetite. It is only to be used in anorexia, when this condition is a secondary symptom, and is counter-indicated by the existence of any gastric disease proper. Dose, 2 to 5 grains.

Orthin.—(Phenyl hydrazin.) Introduced as an antipyretic, but seems to be too toxic for safety.

Ostrya Virginica.—(Ironwood) Alterative, tonic, and antiperiodic in doses of 30 to 60 minims, fluid extract.

Ouabain.—$C_{30}H_{46}O_{12} + 7H_2O$. Is a glucoside from the roots of Ouabaio, *Carissa Schimperi.* It is supplied in white, inodorous crystals, that are soluble in water, and is used to cure whooping-cough, promote digestion, and produce local anæsthesia. It is an extremely poisonous

drug, and is used in minute doses, gr. $\frac{1}{2000}$ to $\frac{1}{250}$, given as a per mille solution. It is probably homologous with strophanthin, which it closely resembles in its action.

Oxy-Naphthoic Acid.—(Alpha.) $C_{11}H_8O_3$. A light, white, crystalline powder, scarcely soluble in water, but soluble in about 10 per cent. of alcohol. Its antiseptic power being greater than that of salicylic acid, it acts well as an external dressing for wounds.

Panbotana.—The bark of a Mexican Leguminosæ, used as a substitute for quinine in 1- or 2-dram doses.

Papain.—A ferment obtained from the milky juice of *Carica papaya*, the South American melon tree, possessed of active digestive powers which are unaffected by the reaction of the fibrin-containing solution. It is the best solvent known for diphtheritic membrane when used in a 5- or 10-per cent. solution. One of the principal fields of usefulness for papain is the expulsion of intestinal parasites. For this purpose it is given in doses of 3 to 10 grains, mixed with 4 grains of Dover's powder, of which one sixth is taken night and morning. It has the advantage, as a digestant, over pepsin and pancreatin, that it acts well in acid, alkaline, and neutral media.

Paracotoin.—A neutral principle from the bark of a South American tree. It comes in yellowish crystals, soluble in either alcohol or chloroform, but not in water. Used to cure diarrhœa in doses of 1 to 3 grains every two or three hours.

Paracresotic Acid.—$C_8H_9O_3$. Is an antipyretic employed mostly in the form of its sodium salt. Though inferior in rheumatism to salicylic acid, it doos not provoke as grave troubles, and is well tolerated by the digestive organs. The dose is from 2 to 3 grains up to 2 drams for adults.

Para-Creasotinate of Sodium.—(Para-Oxytoluate of Sodium.) A white powder slightly soluble in water. Used as an antipyretic and for checking the intestinal catarrhs of children in doses of 10 to 40 grains per day.

Pental.—C_5H_{10}, trimethylethylene—is an anæsthetic said by v. Mering to be both safe and effective. It is readily inhaled without affecting the membranes of the throat or air-passages.

Pereirine.—An alkaloid from Poa pereira bark, that when given with quinine reduces the quantity needed and hastens the cure, as well as curing where quinine alone will fail. Dose, 7½ grains.

Persea Gratissima Gaert.—(Alligator Pear.) Used in Mexico as an anthelmintic and to cure intercostal neuralgia. The dose is 30 to 60 minims.

Phenacetine.—A tasteless, white, glossy, crystalline powder; odorless and tasteless. Scarcely soluble in water, slightly in glycerine, and freely in alcohol. An efficient antirheumatic, antipyretic, and antineuralgic analgesic, with no disagreeable after-effects. Recommended in whooping-cough, dissolved in glycerine. Dose, gr. 1 to 20.

Phenocoll.—The hydrochlorate is generally used.

Phenocoll Hydrochlorate.—A white crystalline powder. A rapid and powerful antipyretic, but with an effect upon the temperature of but short duration. It is especially efficacious in fever of hectic type, does not produce collapse or cyanosis, and gives rise to but slight sweating. It is said to be a better antipyretic than antipyrine or phenacetine. It works more quickly than phenacetine, and is more soluble. It is also a valuable nervine and antirheumatic, but without effect in gonorrheal rheumatism. Dose, 8 to 15 grains. The maximum daily dose is 75 grains.

Phenolid.—A compound of acetanilid, 58 parts, and salicylate of sodium, 43 parts, offered as a remedy for neuralgic affections. Dose, 5 to 10 or 15 grains.

Phenylmethane.—CH_2 $(C_6H_5)_2$. (Toluene.) A crystalline substance having an odor like oranges, insoluble in water but soluble in alcohol and ether. Its physiological effects are said to be identical with antipyrine, but in doses of one half the size.

Phenyl-Urethane.—A white crystalline powder, insoluble in water, but freely soluble in alcohol. This is highly recommended in rheumatism, neuralgia, and fever, in doses of 3 to 8 grains.

Pichi.—Fabiana imbricata. Used in diseases of the genito-urinary tract. The dose is 5 to 20 minims, fluid extract.

Piperazin.—$C_4H_{10}N_2$—is particularly designed to take the place of the lithium salts, and has proven itself of great service in the management of the uric-acid diathesis with the formation of concretions in the kidneys. It is the best uric-acid solvent known in doses of from 5 to 8 grains several times daily, with a maximum of from 15 to 30 grains. Subcutaneously it may be used in 5-grain doses.

Piper Jaborandi.—(Jambu Assu.) A Brazilian shrub used as a stimulant and febrifuge, as well as for the relief of female diseases. The dose is 10 to 30 minims, fluid extract.

Piperonal.—$C_8H_6O_3$. (Heliotropin.) An aldehyde produced by the oxidation of piperine. Insoluble in water but soluble in alcohol and ether. Administered in doses of from 15 to 40 grains it acts as an antipyretic and antiseptic.

Piscidia Erythina, Lin.—(Jamaica dogwood.) An anodyne and hypnotic. Used as a substitute for opium, to which it is said to be superior in some cases of neuralgia, rheumatism, bronchial affections, restlessness, insomnia, etc. The dose is 30 to 120 minims, fluid extract.

Polymnia Vedalia, Lin.—(Bearsfoot.) Used with good results in rheumatism and all glandular inflammations, as well as lumbago and spinal irritation. The dose is 3 drops, fluid extract, repeated every three hours.

Polysolve.—(Sulpholeinic Acid.) Made by the action of sulphuric acid on fixed oils. Used as a vehicle for local antiseptics. It hastens the absorption of drugs through the skin.

Potassium Cantharidate.—This is the celebrated consumption cure of Prof. Leibreich. A clear, transparent liquid, administered hypodermically in doses of 16 minims. It is said to act by directing the bacteria destroying cerum to the seat of the disease, and is claimed to increase the appetite, lessen the number of bacilli in the sputum, and give tone to the general nervous system.

Pseudo-Ephedrine.—A mydriatic alkaloid from Ephedra vulgaris, variety Helvetia of the order Solanaceæ. The crystals have an agreeable odor, are soluble in alcohol, but scarcely in water. Several drops of a 10-%-solution put into the eye in two successive applications at short intervals will maintain its effect on the pupil from six to nine hours.

Ptyehotis Ajowan.—A Persian plant with powerful antiseptic properties, and used to cure rheumatism, intestinal inflammations, dyspepsia, etc. The dose is 15 to 30 minims, fluid extract.

Pyoktanins.—Aniline blue, violet, or yellow, free from every trace of arsenic. These were first discovered by Prof. Stilling as superior in many ways to corrosive sublimate for antiseptic dressing for wounds, ulcers, and pus-forming sores of all kinds. Being non-toxic, they can be used in any quantity with impunity. Cases of cancer and other tumors have been reported cured by injection of blue pyoktanin. In diseases of the skin and eye they have been found to give good results.

Pyridine.—A volatile alkaloid of tobacco, long known, but lately used by inhalation for asthmatic patients.

Pyrodine.—Vide Hydracetin.

Quinolin.—The tartrate of this base has been recommended as an antipyretic. It is a white crystalline powder, given in doses of 15 to 30 grains.

Rubidium Ammonium Bromide.—Lately introduced as a superior to potassium bromide for the same uses. Dose, 1 to 2 drams.

Saccharin.—(Benzoyl Sulphinide), C_6H_4, CO, SO_2, NH. A white powder with a slight odor of bitter almonds, especially when hot ; slightly soluble in water, freely soluble in alcohol and alkaline solutions. It is 280 times sweeter than cane-sugar, and is a good antiseptic and antifermentive. Used in diabetes and cystitis in doses of a fraction of a grain to 6 or 8 grains. Too large doses produce loss of appetite. Used to disguise quinine, in 1 part to 2 of the quinine.

Saccharin Amide.—(Para Benzoyl Sulphinide), $C_6H_4(NH_2)$ CO, SO_2NH. This new compound is like saccharin and closely related thereto. It possesses intense sweetening power and will probably prove a rival to the former.

Salinaphthol.—A combination of salicylic acid and beta-naphthol. It is an oderless, tasteless, white solid, insoluble in water, and has been highly recommended as a substitute for salol in acute articular rheumatism. As an antipyretic and antiseptic it can be given in doses of 4 to 8 grains.

Salipyrin.—$C_{11}H_{12}N_2O.C_7H_6O_3$, the salicylate of antipyrin. Is an analgesic and antipyretic which may be administered in all cases in which the combined action of antipyrin and salicylic acid is desired. It does not produce the profuse perspiration seen after the use of salicylic acid. Dose is 90 grains during the day in 5 or 6 doses.

Salophen. — (Acetyl-Para-Amydosalol.) Occurs in white, crystalline scales; almost insoluble in cold water, fairly soluble in alcohol and ether; odorless, tasteless. It contains 51 per cent. of salicylic acid. It splits up in the body into this and also into acetyl-para-amydophenol, which are recoverable from the urine. Valuable in acute articular rheumatism, and devoid of any ill-effects whatever on heart, kidneys, or stomach. Dr. W. H. Flint (*Journal*, July 30, 1892) used it successfully in 15-grain doses every 3 hours (with the use also, three times a day, of 10 grains of sodium bicarbonate); 100 grains in 24 hours would not be excessive.

Scopola Carniolica.—A Carpathian mountain plant of the order Solanaceæ, the rhizome of which contains the alkaloid hyoscyamine in an almost pure state. It is cheaper than belladonna or hyoscyamus and is equally effective in many cases and better in others. It is an active mydriatic, good as an application to swollen glands, etc. The dose in pleurisy is half a grain of the solid extract at bedtime.

Serum.—That from the blood of immune animals is said to be curative of such contagious diseases as the animal is not susceptible to. Buchner first showed its power.

Simaba Cedron, Planchon.—A South American tree used with good effect in malaria, dyspepsia, and snake bite. The dose is 4 to 15 minims fluid extract.

Sodium Anisate.—Colorless crystals, soluble in cold water. Used as an antiseptic and antipyretic. The dose is 10 to 30 grains.

Sodium Cantharidate.—$C_{10}H_{12}Na_2O_5 + aq$. This is like potassium cantharidate and is used for the same purpose.

Sodium Chloroborite.—A white, inodorous, non-toxic powder, used as an antiseptic internally and externally. In gynecological practice a 5- to 10-per-cent. solution is used for injecting and douching, while in diarrhœa the powder is given internally in 7½-grain doses.

Sodium Dithio Salicylates (No. 1 and No. 2).—Grayish white hygroscopic powders, quite soluble in water. They are used as antiseptics and antirheumatics. The latter in doses of 3 grains twice a day in light cases or every 3 hours in graver ones.

Sodium Paracresotinicum.—A fine crystalline powder, with a bitter but not nauseous taste, soluble in 24 parts of hot water, and does not separate on cooling. Used in gastro-intestinal catarrh, in rheumatism, and consumption with good results. It reduces fever, checks pain, and causes perspiration in doses of 10 to 20 grains in every 3 hours.

Sodium Silico-Fluoride.—Known also as Eugenol. An odorless but powerful deodorizer, not safe for internal use, but an excellent antiseptic for disinfecting the pulp of bad teeth in solutions of 2 grains to an ounce. It is soluble in 150 parts of water.

Solanum Carolinense.—A plant of the order Solanaceæ, a tincture of the berries of which is claimed to cure epilepsy if given in doses of 10 drops to a dram. The common name is horse nettle.

Somnal.—Clear, colorless crystals, slightly bitter taste, and soluble in water or alcohol. The dose to produce sleep is 30 grains, but it has been reported as acting favorably in less than half the cases tried.

Sozoiodolates.—(Salts of Di-Iodophenol-Sulphonate.) Mercuric, potassic, zinc, and sodic salts. The last is in white, odorless crystals, soluble in water and alcohol. They are all used in parasitic skin diseases and as efficient substitutes for iodoform.

Spermine. — $C_4H_{10}N_2$. A substance first isolated by Schreiner from a fluid of the animal body. To it is accredited the benefits derived from Brown-Sequard's Elixir, as it is a constituent thereof and produces the same physiological results. Piperazidine, or diethylene-diamine, has been claimed as the same thing syntheti-

cally produced. Bock showed that it lacked the nerve-exciting properties and could only be an isomeric body.

Strophanthin.—$C_{31}H_{48}O_{12}$. A glucoside from the Apocynaceous climbing plant Strophanthus hispidus. It is of use as a local anæsthetic and as a heart stimulant. The dose is from $\frac{1}{1000}$ to $\frac{1}{888}$ of a grain.

Strychnos Malaccensis.—(Hoang-Nan.) A climbing plant of Southeastern Asia, used in the treatment of leprosy and as an alterative and spinant. The dose is 3 to 10 minims of the tincture.

Styrone.—An antiseptic prepared from storax and having an agreeable odor. It is non-poisonous, slightly soluble in water, and soluble in alcohol.

Succinimide of Mercury.—$(C_4H_4O_2N)_2$ Hg. Silky, colorless needles that are very soluble in water. It is used hypodermically in specific disease, and has the advantage over most soluble mercuric salts of not precipitating albumen. The dose is $\frac{1}{32}$ of a grain, with cocaine to allay smarting.

Sulphaninol.—A yellowish, odorless, tasteless powder, used as a substitute for iodoform. It possesses powerful antiseptic properties.

Sulphonal.—(Diethyl-sulphon-dimethyl-methane, $(CH_3)_2$, C, $(C_2H_5SO_2)_2$. White crystals, soluble in 500 parts of water, 133 parts of ether, or 65 parts of alcohol, and is odorless and almost tasteless. Twenty- to 30-grain doses will give an average sleep of 6 hours to 85 % of all who take it.

Syzygium Jambolanum.—An extract of the fruit of Jambul, which when given to diabetic patients rapidly reduces the quantity of sugar excreted.

Taxine.—A narcotic alkaloid from the yew tree.

Terebene.—$C_{10}H_{16}$. A clear, colorless liquid, having a thyme-like odor, insoluble in water, but soluble in alcohol and ether. It is a stimulating expectorant and

antiseptic in doses of 5 to 20 drops. It is prepared from turpentine by the action of sulphuric acid.

Tetra Chloride of Carbon.—CCl_4. A colorless liquid, insoluble in water but soluble in ether. It is said to be a harmless substitute for chloroform. It acts more rapidly but less intensely. Used by inhalation from a handkerchief to relieve pain.

Tetronal.—(Diethyl-sulphon-diethyl-methane.) $(C_2H_4)_2, C, (C_2H_5SO_2)_2$. A white crystalline substance, very sparingly soluble in water. It is a much more powerful hypnotic than sulphonal, but it is also more toxic. The dose is 4 to 6 grains.

Thalline Sulphate.—$(C_{10}H_{13}NO)_2$, H_2SO_4 (Sulphate of tetra-hydropara-quinanisol.) A yellowish-white crystalline powder, having a bitterish, saline, aromatic taste and cumerin odor; soluble in 7 parts of water and 100 of alcohol. It is antipyretic, antiseptic, and antizymotic, and is given in doses of 2 to 8 grains in water or wine. It is used as an injection in acute urethritis. The tartrate of thalline is also frequently used.

Thermifugin.—(Methyl-trihydro-oxyquinoline carbonate of sodium.) C_9H_8 (CH_3) N, CO ONa. A yellowish-white crystalline substance, forming with water a brown solution. It is used to increase the blood pressure, reduce the temperature, and lower the pulse rate.

Thiol.—An artificial representative of natural ichthyol; is highly recommended for use in gynecological practice. It is said that under its use pelvic exudates disappear in a few weeks. It may be used internally in 2- to 10-grain doses, and externally in the form of an ointment.

Thioresorcin.—C_6H_4 $(SH)_2$. A grayish powder, free from bad odor, insoluble in water and scarcely soluble in alcohol, but readily soluble in alkaline solutions. It is an efficient antiseptic and cheap substitute for iodoform.

Trichloracetic Acid.—$HC_2Cl_3O_2$. Is one of the best caustics in materia medica, especially for rhino-pharyngology. Its action is almost painless, and healing is free from pain or reaction.

Trional.—(Diethyl-sulphon-methyl-ethyl-methane.) A white crystalline substance insoluble in water and possessing an hypnotic power intermediate between sulphonal and tetronal. The dose also is midway between them.

Tuberculin.—Kochii. A clear, syrupy liquid of a faint brownish-red color and neutral reaction, soluble in water, with greenish fluorescence. It possesses an yeasty odor when fresh. The dose is $\frac{1}{64}$ of a minim, diluted as required with carbolic acid water and gradually increased. This is the remedy that created such world-wide excitement for a time. It is a product of pure cultures of tubercle bacilli preserved in 50 % of glycerine. The title lymph applied to it by the newspapers was a total misnomer. It in no way resembles or has any relation to lymph.

Tumenol.—Is especially recommended for the itching of eczema and other forms of dermatitis. It is a sulphonated preparation of hydrocarbon, and occurs in three forms—tumenol itself, tumenol sulphone, and tumenol sulphonic acid. It may be used in the form of a 5- to 10-% paste, or as a 10-% tincture.

Umbellularia Californica.—(California laurel.) This plant is used with good results in neuralgic headache, meningitis, colic, etc. The dose is 10 to 30 minims of the fluid extract.

Uralium.—(Chloral-methane.) Colorless, bitter crystals, almost insoluble in water, but soluble in alcohol. As an hypnotic it resembles somnal. The dose is about 10 grains.

Urethane.—(Ethyl carbonate.) CO, NH_2, OC_2, H_5. Transparent crystals, with a cool, saline, slightly bitter taste;

soluble in water and alcohol, but scarcely soluble in ether. A good, mild sleep-producer for children. The dose is 4 to 50 grains, according to age. It is antagonistic to tetanus, convulsions, and strychnine.

Vasicine.—An alkaloid from the leaves of Adhatoda vasica, Nees, of the order Acanthaceæ. The plant is used in India, Ceylon, and Malay as an expectorant, as well as insecticide.

Vernouin.—$C_{10}H_{24}O_7$. A glucoside from Vernonia nigratans, of the order Compositæ. It comes as a white hygroscopic powder, and is used like digitaline in heart diseases, but is one fortieth weaker.

Xylene.—(Dimethyl-benzene.) A clear, colorless liquid, with an agreeable, aromatic odor. It is used as a substitute for carbolic acid, having the advantage of being much less toxic.

INCOMPATIBILITY.

The following simple rules, given by Dr. S. O. Potter, may prove a great convenience to student and practitioner:

Never use more than one remedy at a time, if one will serve the purpose.

Never use strong mineral acids in combination with other agents, unless you know exactly what reaction will ensue. They decompose salts of the weaker acids and form ethers with alcohol.

Select the simplest solvent, diluent, or excipient you know of, remembering that the solvent power of alcohol and water, for their particular substances, decreases in proportion to the quantity of the other added.

Never combine *Free Acids* with hydrates or carbonates.

Generally do not combine two or more soluble salts.

The following more or less insoluble salts will be formed whenever the materials of which they are composed are brought together in solutions: the Hydrates, Carbonates, Phosphates, Borates, Arseniates, and Tannates of most earthy and heavy metals and alkaloids, and the metallic Sulphides; the Sulphates of Calcium, of Lead, and of the subsalts of Mercury; the Chlorides, Iodides, and Bromides of Bismuth, Silver, Lead, and subsalts of Mercury; the Iodides of Quinine, Morphine, and most alkaloids.

Alkalies precipitate the alkaloids and the soluble non-alkaline metallic salts, and (as also metallic Hydrates and Carbonates) neutralize free acids.

Silver Nitrate, *Lead Acetate*, *Corrosive Sublimate*, *Potassium Iodide* should nearly always be prescribed alone. The first with Creasote forms an explosive compound. *Aconite* should never be given in any vehicle except water.

Silver Nitrate, and *Lead Acetate* and *Subacetate*, although incompatible with almost everything, may be combined with Opium ; the latter forming with Opium a compound which, although insoluble, is therapeutically active as a lotion.

Corrosive Sublimate is incompatible with almost everything, and should be given in *Simple Syrup ;* even the Compound Syrup of Sarsaparilla is said to decompose it.

Tannic Acid, and substances containing it, are incompatible with albumen and gelatin. *Tannic Acid*, *Iodine*, and the *soluble Iodides* are incompatible with the alkaloids and substances containing them, and with most soluble metallic salts. *Vegetable Infusions* are generally incompatible with metallic salts.

Glucosides, such as Santonin and Colocynthin, should not be prescribed with free acids or Emulsin.

Dangerous Compounds, because poisonous, are : Potassic Iodide with Potassic Chlorate ; Hydrocyanic acid or Potassium Cyanide with metallic Hydrates, Carbonates, Sub-nitrates or Sub-chlorides, as Bismuth Carbonate, or Nitrate, or Calomel.

Explosions would result from the combination of powerful oxidizers with readily oxidizable substances, as—Potassium Chlorate or Permanganate with Tannin, Sugar, Sulphur, Sulphides, Vegetable powders, Glycerin, Alcohol, Tinctures, or Ether.

FOR ADDITIONAL NOTES.

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